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(54) Title: DIARYL-PURINE, AZAPURINES AND -DEAZAPURINES AS NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS FOR TREATMENT OF HIV

(57) Abstract: This application concerns certain 2-phenylamino-6-aryl amino-, 6-aryloxy-, and 6- arylthio- purines, -ozapurines and -deazapurines. These compounds are non-nucleoside reverse transcriptase inhibitors and have potential as anti-HIV treatment.

DIARYL-PURINES, -AZAPURINES AND -DEAZAPURINES AS NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS FOR TREATMENT OF HIV

Cross-reference to Related Applications

This application claims priority to U.S. Provisional Application Ser. No. 60/678,667, filed May 5, 2005, the entirety of which is incorporated herein by reference.

Field of the Invention

This application concerns certain 2-phenylamino-6-aryl amino-, 6-aryloxy-, and 6-arylthio- purines, -azapurines and -deazapurines. These compounds are non-nucleoside reverse transcriptase inhibitors and have potential as anti-HIV treatment.

Background of the Invention

Human Immunodeficiency Virus (HIV) presents a public-health and social catastrophe too well known to require documentation. One therapeutic approach to HIV has been inhibition of the viral RNA-dependent RNA polymerase; this enzyme is frequently referred to as "reverse transcriptase," abbreviated "RT." The first RT inhibitors were nucleoside analogs such as AZT and ddI. Although such nucleoside RT inhibitors were frequently effective against the wild-type virus, any single-drug treatment has been hobbled by the virus's ability to readily produce drug-resistant mutants. This has led to an intense search for non-nucleoside RT inhibitors ("NNRTIs") which are both effective and capable of retaining their effectiveness despite drug-resistance mutations. A recent review of NNRTIs can be found Balzarni, J., 2004, *Cur. Top. Med. Chem.* 4, 921-44 (Erratum ibid. 4, 1825).

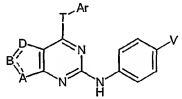
Four leading NNRTI are: 1) Efavirenz (4S)-6-chloro-4-(cyclopropylethynyl)-1,4-dihydro-4-(trifluoromethyl)-2H-3,1-benzoxazin-2-one; 2) Capravirine: 1H-Imidazole-2-methanol, 5-((3,5-dichlorophenyl)thio)-4-(1-methylethyl)-1-(4-pyridinylmethyl)-carbamate (ester); 3) Etravirine (TMC 125): 4-((6-amino-5-bromo-2-((4-cyanophenyl)amino)-4-pyrimidinyl)oxy)-3,5-dimethyl-benzonitrile; and 4) Rilpivirine (TMC-278): 4-([4-[(4-[(1*E*)-2-cyanoethenyl]-2,6-dimethylphenyl)amino]-2- pyrimidinyl)amino]benzonitrile. Rilpivirine and Etravirine belong to a subclass of NNRTIs called diarylpyrmidines ("DAPY"). For a review of these DAPY NNRTIs see Ludovici, D.W., *et al.*, 2002, *Bioorg. Med. Chem. Lett.*

11, 2235-9. An extensive patent literature also exists for DAPY. U.S. Patent No. 6,197,779; WO 00/27850; WO 2003/016306; and WO 2004/069812, all assigned to Janssen Pharmaceuticals.

Diaryl compounds similar to Etravirine and Rilpivirine where the pyrimidine moiety is replaced by a purine are described in WO 2005/028479, which also is assigned to Janssen.

Brief Description of the Invention

The invention provides a compound of formula I



I

where the dashed line represents a double bond that may be located either between A and B or between B and D,

where A is –N= , N(Z) or C(Z);

B is CH or =N-;

D is CW or =N-, or N(W);

T is NH, O or S;

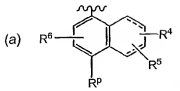
Z is H, F, Cl, Br, CH_3, CH_2CH_3, cyclopropyl, or benzyl, in which the phenyl moiety of the benzyl group is optionally substituted with methyl or methoxy, provided that Z is not F or Cl when A is NZ;

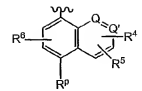
W is H, F, Cl, Br, methyl, ethyl, cyclopropyl, allyl, CH_2CF_3, cyanomethyl, cyanoethyl, CH=CHCN, or benzyl, in which the phenyl moiety of the benzyl group is optionally substituted with one or two groups selected independently from methoxy and methyl, provided that W is not F or Cl when D is NW;

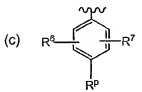
V is F, Cl, CN, SO_2CH_3, SO_2NH_2, SO_2NHCH_3, C≡CCH_3, or CH=CHCN;

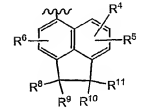
provided that when D is CW, A is not CZ and further provided that when neither A nor D is CZ or CW, then B is CH; and

Ar is selected from (a), (b), (c), and (d) below:







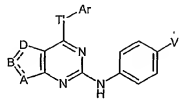


wherein each R^P is selected from among methyl, ethyl, propyl, isopropyl, cyclopropylmethyl, or C_3-C_6 cycloalkyl, cyano, CH=CHCN, Cl, Br, I, acetyl and alkylamino; R^4, R^5, and each R^6 are independently selected from among H, F, Cl, Br, CH_3, CF_3, CH_2F, CHF_2, isopropyl, cyclopropyl, OCH_3, OH, OCF_3, NH_2 and $NHCH_3$, or R^6 and R^P on adjacent ring atoms, together with the ring atoms to which they are attached, form an additional fused five-membered ring; Q and Q' are independently selected from N and CH; R^7 is Cl, Br, I, CH_3, CF_3, OCH_3, isopropyl, cyclopropyl, *t*-butyl, or cyclobutyl; and $R^8 - R^{11}$ are, independently, H or CH_3.

Compounds of formula I have inhibitory activity against both wild-type and mutated forms of human immunodeficiency virus type 1 (HIV-1).

Detailed Description of the Invention

In one embodiment this invention provides a compound of formula IA, in which the 6-linker T of formula I is T', which may be O or S.



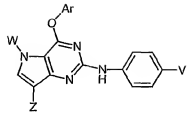
IA

When T of formula I or T' of formula IA is O, the invention excludes 1) compounds where both R^P and V are CH=CHCN or cyano unless at least one of A or D is neither –N= nor –NH- and 2) compounds where a) R is CH=CHCN, cyano, or methyl; b) V is cyano or CH=CHCN; and c) A and D are both one of –N= ; N-benzyl or N-(substituted benzyl).

In one subgeneric embodiment, the invention provides a compound of formula IA where Ar is selected from 4-cyclopropyl phenyl; 4-cyclopropylmethyl phenyl; 4-bromophenyl; 4-cyclopropyl-naphth-1-yl; 2,6-dimethyl-4-cyanophenyl; 2,6-dimethoxy-4-cyanophenyl; 2,6-dimethyl-4-(2-cyanoethenyl) phenyl; 2,6-dimethoxy-4-(2-cyanoethenyl) phenyl; 2-methyl-4-cyclopropyl phenyl; 2,6-dimethyl-4-cyclopropyl phenyl; 2,6-di-trifluoromethyl-4-cyclopropyl phenyl; 2,4,6-trimethyl phenyl; and 2,6-dimethyl-4-acetyl phenyl.

In another subgeneric embodiment, the invention contemplates a compound of formula IA where Ar is selected from the following: 5-cyclopropyl-8-quinolyl; 5-isopropyl-8-quinolyl; 5-cyano-8-quinolyl; 5-cyclopropyl-7-trifluoromethyl-8-quinolyl; 5-acetyl-8-quinolyl; 5-cyano-7-methoxy-8-quinolyl; 5-cyano-7-methyl-8-quinolyl; 5-cyclopropyl-7-trifluoromethoxy-8-isoquinolyl; 5-cyano-8-isoquinolyl; 5-cyano-7-methoxy-8-isoquinolyl; 5-cyano-7-methyl-8-isoquinolyl; 5-cyclobutyl-7-difluoromethyl-8-isoquinolyl; 5,7-dimethyl-8-cinnolyl; 5-cyclopropyl-7-methyl-8-cinnolyl; and 5-(2-cyanoethenyl)-7-methyl-8-cinnolyl.

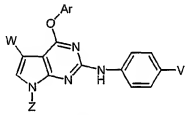
In another subgeneric embodiment, the invention provides a compound of formula IA-1



IA-1

where Ar, V, W, and Z are defined as for formula I.

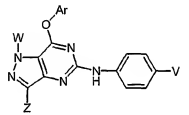
In another subgeneric embodiment, the invention provides a compound of formula IA-2



IA-2

where Ar, V, W, and Z are defined as for formula I.

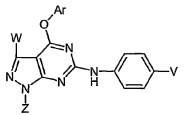
In another subgeneric embodiment, the invention provides a compound of formula IA-3



IA-3

where Ar, V, W, and Z are defined as for formula I.

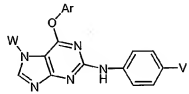
In another subgeneric embodiment, this invention provides a compound of formula IA-4



IA-4

where Ar, V, W, and Z are defined as for formula I.

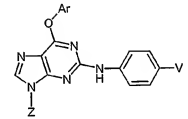
In another subgeneric embodiment, this invention provides a compound of formula IA-5



IA-5

where Ar, V, W, and Z are defined as for formula I.

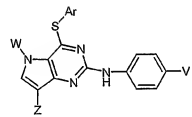
In another subgeneric embodiment, this invention provides a compound of formula IA-6



IA-6

where Ar, V, W, and Z are defined as for formula I.

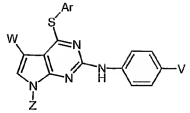
In another subgeneric embodiment, this invention provides a compound of formula IA-7



IA-7

where Ar, V, W, and Z are defined as for formula I.

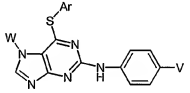
In another subgeneric embodiment, this invention provides a compound of formula IA-8



IA-8

where Ar, V, W, and Z are defined as for formula I.

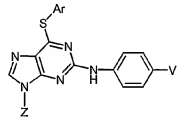
In another subgeneric embodiment, this invention provides a compound of formula IA-9



IA-9

where Ar, V, W, and Z are defined as for formula I.

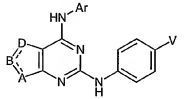
In another subgeneric embodiment, this invention provides a compound of formula IA-10



IA-10

where Ar, V, W, and Z are defined as for formula I.

In another embodiment, this invention provides a compound of formula IB

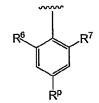


IB

where all substituents are as described above, except that when Ar is (c), this invention excludes compounds in which V is either cyano or CH=CHCN, unless A or D is CZ or CW.

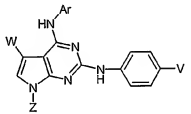
In one subgeneric embodiment, the invention provides a compound of formula IB where Ar is (c), subject to the exclusion in the immediately preceding paragraph.

In a more specific subgeneric embodiment, the invention provides a compound of formula IB where Ar is



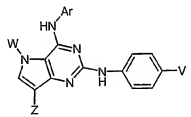
where R^p is CN, CH=CHCN, or cyclopropyl; where R^6 and R^7 are either both methyl or both methoxy; and subject to the exclusion described above for formula IB.

In another subgeneric embodiment, this invention provides a compound of formula IB-1.



IB-1

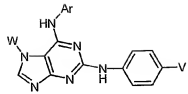
In another subgeneric embodiment, this invention provides a compound of formula IB-2.



IB-2

where Ar, V, W, and Z are as described above for formula IB.

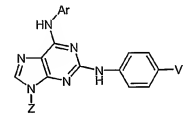
In another subgeneric embodiment, the invention provides a compound of formula IB-3.



IB-3

where Ar, W, and Z are as described above for formula IB.

In another subgeneric embodiment, the invention provides a compound of formula IB-4.



IB-4

where Ar, V, and Z are as described above for formula IB.

In more specific embodiments, the invention provides compounds of any of IA-1, IA-2, IA-3, IA-4, IA-5, IA-6, IA-7, IA-8, IA-9, IA-10, IB-1, IB-2, IB-3, and IB-4, where Ar is (a).

In additional more specific embodiments, the invention provides compounds of any of IA-1, IA-2, IA-3, IA-4, IA-5, IA-6, IA-7, IA-8, IA-9, IA-10, IB-1, IB-2, IB-3, and IB-4, where Ar is (b).

In additional more specific embodiments, the invention provides compounds of any of IA-1, IA-2, IA-3, IA-4, IA-5, IA-6, IA-7, IA-8, IA-9, IA-10, IB-1, IB-2, IB-3, and IB-4, where Ar is (c).

In additional more specific embodiments, the invention provides compounds of any of IA-1, IA-2, IA-3, IA-4, IA-5, IA-6, IA-7, IA-8, IA-9, IA-10, IB-1, IB-2, IB-3, and IB-4, where Ar is (d).

In a more specific subgeneric embodiment, this invention provides or contemplates a compound of formula IA-7, IA-8, IA-9, or IA-10, where Ar is 4-cyclopropyl-, 4-acetyl-, 4-methyl-, 4-bromo-, or 4-cyano-2,6-di-substituted phenyl.

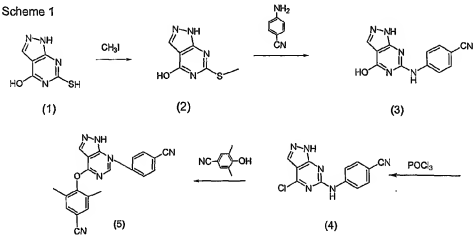
In another more specific subgeneric embodiment, this invention provides or contemplates a compound of formula IA-1, IA-2, IA-3, or IA-4, where Ar is 4-cyclopropyl-, 4-acetyl-, 4-methyl-, 4-bromo-, or 4-cyano-2,6-di-substituted phenyl.

In another more specific subgeneric embodiment, this invention provides or contemplates a compound of formula IA-5 or IA-6, where Ar is 4-cyclopropyl-, 4-acetyl-, 4-methyl-, 4-bromo-or 4-cyano-2,6-di-subsituted phenyl.

Synthetic procedures

Compounds of this invention which are of the **7-deaza-8-azapurine** type can be prepared according to Scheme 1.

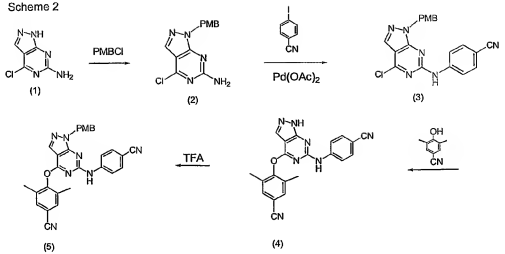
Scheme 1



Compound (1), 2-mercapto-6-hydroxy-7-deaza-8-aza-purine, can be synthesized by published procedures known to those skilled in the art. Youssif, S., *et al.*, 2003, *Bull. Kor. Chem. Soc.*, 24, 1429-32; Bontems, R.J., *et al.*, 1990, *J. Med. Chem.* 33, 2174-8; Badger, G.M., & Rao, R.P., 1965, *Aust. J. Chem.* 18, 1267-71.

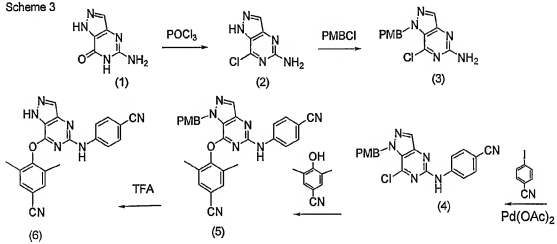
Alternatively, the 7-deaza-8-azapurines can be synthesized according to Scheme 2, where "PMBCl" is *p*-methoxy benzyl chloride. The starting material is prepared by published procedures known to those skilled in the art. Seela, F., 1999, *Helv. Chim. Act.* 82, 105-124; Taylor, E., 1992, *Tetrahedron* 48, 8089-100; Seela, F., 1986, *Helv. Chim. Act.* 69, 1602-1613.

Scheme 2



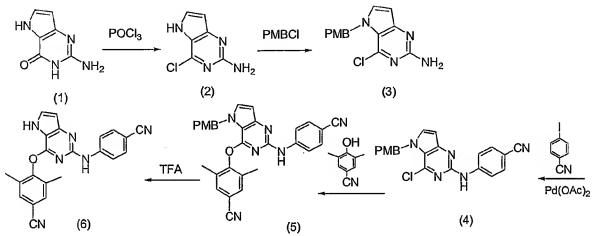
The **8-aza-9-deazapurines** of this invention can be synthesized according to Scheme 3. The synthesis of the starting material was described by Lewis, A.F., & Townsend, L.B., 1982, *J. Am. Chem. Soc.* **104**, 1073-78.

Scheme 3



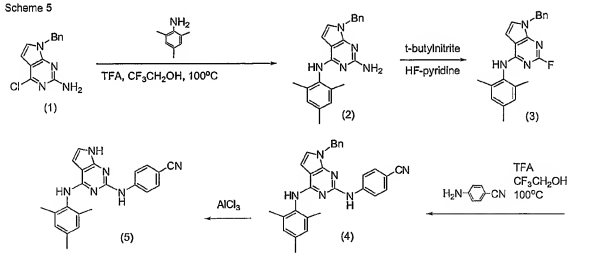
The **9-deazapurines** of this invention can be synthesized by Scheme 4. The synthesis of the starting material is described by Kielich, Klaus, *ed.*, "Synthetic Communications" **2002** vol. 32, pp-3797-3802.

Scheme 4



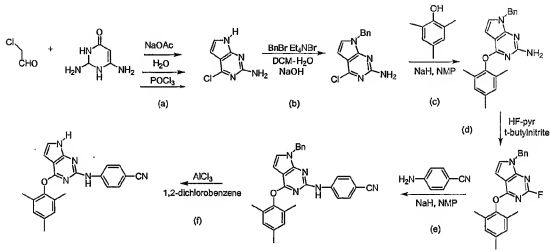
The **7-deazapurines** of this invention are prepared by the procedure of Scheme 5. The starting material can be synthesized by the condensation of 2,6-diamino-1,2-dihydro[3H]pyrimidin-4-one with chloroacetaldehyde followed by treatment with phosphorus oxychloride, as indicated in Examples 1 and 3.

Scheme 5

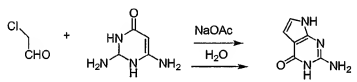


The **purine** compounds of this invention can be synthesized by strategies similar to those provided above, using N^7-benzyl-2,6-dichloropurine as the starting material. This procedure is illustrated in WO 2005/028479.

Example 1



Step Al:

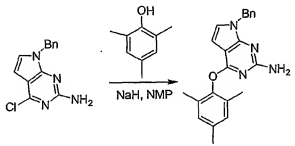


2-Amino-3,7-dihydro-pyrrolo[2,3-d]pyrimidin-4-one. To a mixture of 2,4-diamino-6-hydroxypyrimidine (20.0 g, 159 mmol) and NaOAc (26.0 g, 317 mmol) in H_2O (300 mL) at 65°C was added a solution of chloroacetaldehyde (22.0 mL, 50% in H_2O, 173 mmol) in H_2O (22 mL) dropwise for 90 min. The mixture was stirred at 65°C for an additional 2 h and cooled to room temperature. The reaction mixture was concentrated *in vacuo* to one third of its original volume and stored at 4 °C for 16 h. The light pink precipitates were filtered, washed with an ice cold H_2O (5 mL), and dried under high vacuum for 16 h. The precipitates were placed in Soxhlet extractor and refluxed with methanol (200 mL) for 24 h. The methanol was concentrated to give 13.3 g (56%) of 2-amino-3,7-dihydro-pyrrolo[2,3-d]pyrimidin-4-one as a light pink solid.

Step A2:

4-Chloro-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine. To a solution of 2-amino-3,7-dihydro-pyrrolo[2,3-d]pyrimidin-4-one (5.00 g, 33.3 mmol), dimethylaniline (4.22 mL, 41.0 mmol) and benzyltriethylammonium chloride (15.2 g, 66.6 mmol) in acetonitrile (25 mL) at room temperature under argon was added $POCl_3$ (18.6 mL, 200 mmol) dropwise for 30 min. The mixture was refluxed at 85°C for 3 h and cooled to room temperature. The reaction was concentrated *in vacuo* to brown oil and to the oil was added an ice cold H_2O (10 mL). The pH of the solution was adjusted to 5 by the addition of an aqueous NH_4OH solution. Silica gel chromatography (CH_2Cl_2:MeOH = 95: 5) yielded 2.53 g (45%) of 4-chloro-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine as a light yellow solid. The product was then benzylated at N^7 using standard techniques.

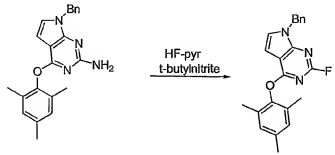
Step C:



7-benzyl-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine. To a solution of 2,4,6-trimethylphenol (161 mg, 1.16 mmol) in 1-methyl-2-pyrridone (2 mL) in a sealed tube was added NaH (46 mg, 1.16 mmol). The reaction mixture was stirred at room temperature for 15 min and a solution of 7-benzyl-4-chloro-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine (100 mg, 0.39 mmol) in 1-methyl-2-pyrridone (1 mL) was added to the mixture. The mixture was heated at 150 °C for 16 h and cooled to room temperature. The reaction mixture was poured into ice water and extracted with EtOAc (2 x 20 mL). The combined organic solution was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and

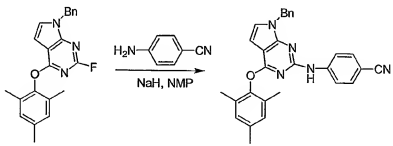
concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 107 mg (77%) of 7-benzyl-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine.

Step D:



7-benzyl-2-fluoro-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidine. To 7-benzyl-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine (105 mg, 0.29 mmol) in a polyethylene flask at -50 °C under argon was added 60% HF in pyridine (12 mL). To the resulting solution tert-butylnitrite (0.052 mL, 0.44 mmol) was added dropwise for 5 min. The reaction was warmed to -40 °C and stirred for 30 min at the temperature. The reaction mixture was diluted with $CHCl_3$ (100 mL) and poured into K_2CO_3 (3 g) in a beaker. Ice water (50 mL) was carefully added to the mixture. The $CHCl_3$ layer was separated, washed with aqueous $NaHCO_3$ solution (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 72 mg (68%) of 7-benzyl-2-fluoro-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidine as a light yellow solid.

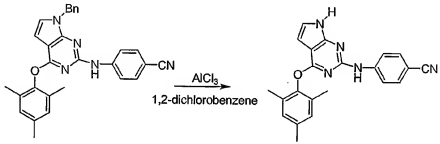
Step E:



4-[7-benzyl-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile. To a solution of 4-aminobenzonitrile (101 mg, 0.86 mmol) in 1-methyl-2-pyrridone (1 mL) was added NaH (34 mg, 0.86 mmol). The reaction mixture was stirred at

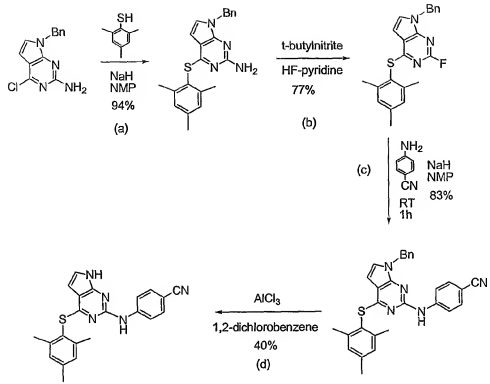
room temperature for 15 min and a solution of 7-benzyl-2-fluoro-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidine (62 mg, 0.17 mmol) in 1-methyl-2-pyrridone (1 mL) was added to the mixture. The mixture was stirred at room temperature for 1 h, poured into ice water, and extracted with EtOAc (2 x 20 mL). The combined organic solution was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 64 mg (82%) of 4-[7-benzyl-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile.

Step F:

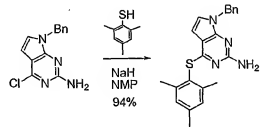


4-[4-(2,4,6-Trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile. To a solution of 4-[7-benzyl-4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile (38 mg, 0.083 mmol) in 1,2-dichlorobenzene (1 mL) was added aluminum chloride (55 mg, 0.42 mmol). The reaction mixture was stirred at 160 °C for 4 h and cooled to room temperature. The mixture was poured into ice water and extracted with CH_2Cl_2 (2 x 10 mL). The combined organic solution was washed with brine (10 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 50:50) yielded 15 mg (49%) of 4-[4-(2,4,6-trimethyl-phenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile as a tan solid.

Example 2



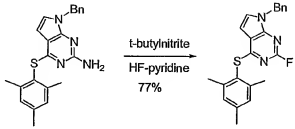
Step A:



7-benzyl-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine. To a solution of 2,4,6-trimethylbenzene-1-thiol (231 mg, 1.52 mmol) in 1-methyl-2-pyridone (2 mL) was added NaH (58 mg, 1.52 mmol). The reaction mixture was stirred at room temperature for 15 min and a solution of 7-benzyl-4-chloro-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine (131 mg, 0.51 mmol) in 1-methyl-2-pyridone (2 mL) was added to the mixture. The mixture was heated at 60 °C for 16 h and cooled to room temperature. The reaction was poured into ice water and extracted with EtOAc (2 x 20 mL). The combined organic solution

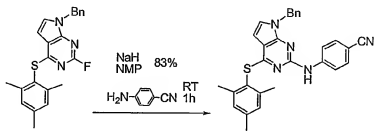
was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 180 mg (94%) of 7-benzyl-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine.

Step B:



7-benzyl-2-fluoro-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidine. To 7-benzyl-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine (155 mg, 0.41 mmol) in a polyethylene flask at -50 °C under argon was added 60% HF in pyridine (12 mL). To the solution was added tert-butylnitrite (0.074 mL, 0.62 mmol) dropwise for 5 min. The reaction was warmed to -40 °C and stirred for 30 min at the temperature. The reaction was diluted with $CHCl_3$ (100 mL) and poured into K_2CO_3 (3 g) in a beaker. To the mixture was carefully added ice water (50 mL). The $CHCl_3$ layer was separated, washed with aqueous $NaHCO_3$ solution (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 118 mg (77%) of 7-benzyl-2-fluoro-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidine as a yellow solid.

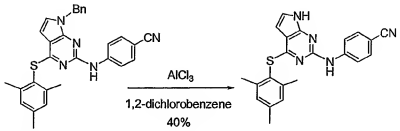
Step C:



4-[7-benzyl-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile. To a solution of 4-aminobenzonitrile (184 mg, 1.56 mmol) in 1-methyl-2-pyrridone (2 mL) was added NaH (62 mg, 1.56 mmol). The reaction mixture was stirred at room temperature for 15 min and a solution of 7-benzyl-2-fluoro-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidine (118 mg, 0.31 mmol) in 1-methyl-2-pyrridone (2 mL) was added to the mixture. The mixture was stirred at room temperature for 4 h, then

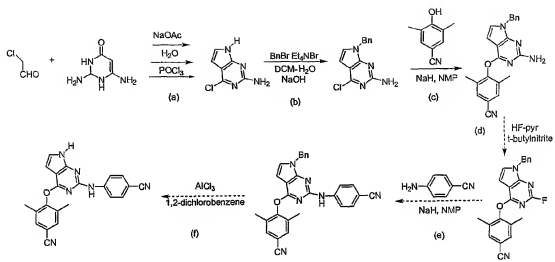
poured into ice water and extracted with EtOAc (2 x 20 mL). The combined organic solution was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 123 mg (83%) of 4-[7-benzyl-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile.

Step D:



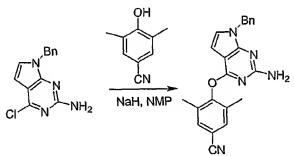
4-[4-(2,4,6-Trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile. To a solution of 4-[7-benzyl-4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile (103 mg, 0.21 mmol) in 1,2-dichlorobenzene (2 mL) was added aluminum chloride (87 mg, 0.65 mmol). The reaction mixture was stirred at 160 °C for 1.5 h and cooled to room temperature. The mixture was poured into ice water and extracted with CH_2Cl_2 (2 x 10 mL). The combined organic solution was washed with brine (10 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 50:50) yielded 28 mg (34%) of 4-[4-(2,4,6-trimethyl-phenylsulfanyl)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile as a tan solid.

Example 3



Steps A and B as in Example 1.

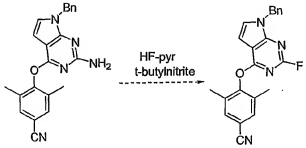
Step C:



4-(2-Amino-7-benzyl-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile. To a solution of 4-hydroxy-3,5-dimethylbenzonitrile (1.62 mg, 11.0 mmol) in 1-methyl-2-pyrridone (5 mL) in a sealed tube was added NaH (441 mg, 11.0 mmol). The reaction mixture was stirred at room temperature for 15 min and a solution of 7-benzyl-4-chloro-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine (950 mg, 3.67 mmol) in 1-methyl-2-pyrridone (5 mL) was added to the mixture. The mixture was heated at 150 °C for 16 h and cooled to room temperature. The reaction was poured into ice water and extracted with EtOAc (2 x 50 mL). The combined organic solution was washed with H_2O (50 mL) and brine (50 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25)

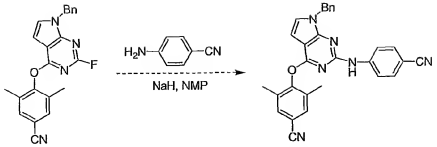
yielded 1.12 mg (83%) of 4-(2-amino-7-benzyl-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile.

Step D:



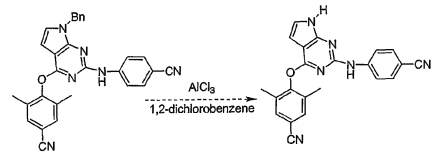
4-(7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile. To 4-(2-amino-7-benzyl-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile (70 mg, 0.19 mmol) in a polyethylene flask at -50 °C under argon was added 60% HF in pyridine (12 mL). To the solution was added tert-butylnitrite (0.068 mL, 0.57 mmol) dropwise for 5 min. The reaction was warmed to -40 °C and stirred for 30 min at the temperature. The reaction was diluted with $CHCl_3$ (100 mL) and poured into K_2CO_3 (3 g) in a beaker. To the mixture was carefully added ice water (50 mL). The $CHCl_3$ layer was separated, washed with aqueous $NaHCO_3$ solution (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 36 mg (51%) of 4-(7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile.

Step E:



4-[7-benzyl-2-(4-cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile. To a solution of 4-aminobenzonitrile (54 mg, 0.46 mmol) in 1-methyl-2-pyrridone (1 mL) was added NaH (18 mg, 0.46 mmol). The reaction mixture was stirred at room temperature for 15 min and a solution of 4-(7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile (34 mg, 0.091 mmol) in 1-methyl-2-pyrridone (1 mL) was added to the mixture. The mixture was stirred at room temperature for 1 h, poured into ice water, and extracted with EtOAc (2 x 20 mL). The combined organic solution was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 28 mg (65%) of 4-[7-benzyl-2-(4-cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile.

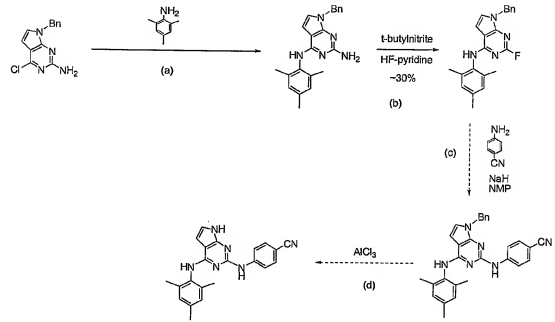
Step F:



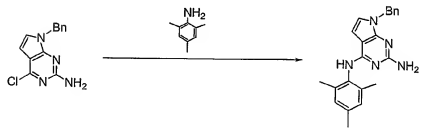
4-[2-(4-Cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile. To a solution of 4-[7-benzyl-2-(4-cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile (28 mg, 0.060 mmol) in 1,2-dichlorobenzene (1 mL) was added aluminum chloride (40 mg, 0.30 mmol). The reaction mixture was stirred at 160 °C for 45 min and cooled to room temperature. The mixture was poured into ice water and extracted with CH_2Cl_2 (2 x 10 mL). The combined organic solution was washed with brine (10 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography

(Hexanes:EtOAc = 50:50) yielded 6 mg (27%) of 4-[2-(4-cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile as a tan solid.

Example 4



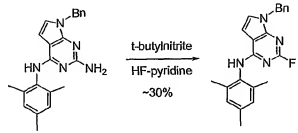
Step A:



7-benzyl-N4-(2,4,6-trimethyl-phenyl)-7H-pyrrolo[2,3-d]pyrimidine-2,4-diamine. To a suspension of 7-benzyl-4-chloro-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine (200 mg, 0.78 mmol) and 2,4,6-trimethylaniline (0.44 mL, 3.08 mmol) in 2,2,2-trifluoroethanol (4 mL) was added trifluoroacetic acid (0.48 mL, 6.24 mmol). The resulting solution was heated at 100 °C for 2 days and cooled to room temperature. The reaction was concentrated to brown oil and diluted with CH_2Cl_2 (30 mL). The organic solution was washed with aqueous $NaHCO_3$

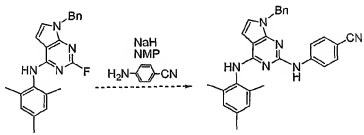
solution (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (CH_2Cl_2:MeOH = 95:5) yielded 251 mg (90%) of 7-benzyl-N4-(2,4,6-trimethyl-phenyl)-7H-pyrrolo[2,3-d]pyrimidine-2,4-diamine.

Step B:



(7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-(2,4,6-trimethyl-phenyl)-amine. To 7-benzyl-N4-(2,4,6-trimethyl-phenyl)-7H-pyrrolo[2,3-d]pyrimidine-2,4-diamine (251 mg, 0.70 mmol) in a polyethylene flask at -50 °C under argon was added 60% HF in pyridine (24 mL). To the solution was added tert-butylnitrite (0.42 mL, 3.5 mmol) dropwise for 10 min. The reaction was warmed to -40 °C and stirred for 30 min at the temperature. The reaction was diluted with $CHCl_3$ (200 mL) and poured into K_2CO_3 (6 g) in a beaker. To the mixture was carefully added ice water (100 mL). The $CHCl_3$ layer was separated, washed with aqueous $NaHCO_3$ solution (40 mL) and brine (40 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 56 mg (22%) of (7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-(2,4,6-trimethyl-phenyl)-amine.

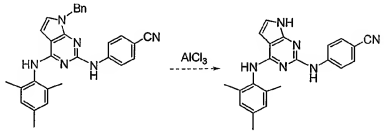
Step C:



4-[7-benzyl-4-(2,4,6-trimethyl-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile. To a suspension of (7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-(2,4,6-trimethyl-phenyl)-amine (42 mg, 0.12 mmol) and 4-aminobenzonitrile (55 mg, 0.47 mmol) in 2,2,2-trifluoroethanol (4 mL) was added trifluoroacetic acid (0.072 mL, 0.94 mmol). The resulting solution was heated at 90 °C for 16 h, then cooled to room temperature.

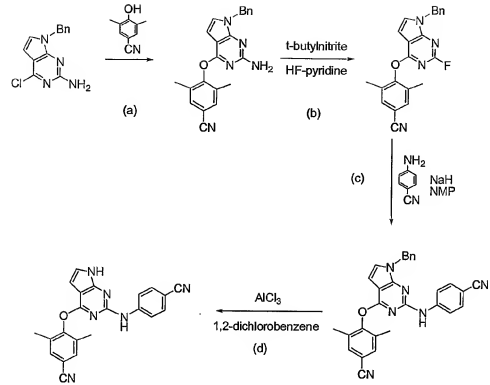
The reaction was concentrated to produce a brown oil and diluted with CH_2Cl_2 (30 mL). The organic solution was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 34 mg (64%) of 4-[7-benzyl-4-(2,4,6-trimethyl-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile.

Step D:

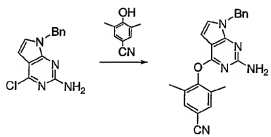


4-[4-(2,4,6-Trimethyl-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile. To a solution of 4-[7-benzyl-4-(2,4,6-trimethyl-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile (34 mg, 0.074 mmol) in 1,2-dichlorobenzene (1 mL) was added aluminum chloride (50 mg, 0.37 mmol). The reaction mixture was stirred at 160 °C for 2 h and cooled to room temperature. The mixture was poured into ice water and extracted with $CHCl_3$ (2 x 10 mL). The combined organic solution was washed with brine (10 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (CH_2Cl_2:Acetone = 90:10) yielded 5 mg (19%) of 4-[4-(2,4,6-trimethyl-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino]-benzonitrile as a tan solid.

Example 5



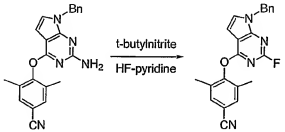
Step A:



4-(2-Amino-7-benzyl-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile. To a solution of 4-hydroxy-3,5-dimethylbenzonitrile (1.62 mg, 11.0 mmol) in 1-methyl-2-pyrridone (5 mL) in a sealed tube was added NaH (441 mg, 11.0 mmol). The reaction mixture was stirred at room temperature for 15 min and a solution of 7-benzyl-4-chloro-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine (950 mg, 3.67 mmol) in 1-methyl-2-pyrridone (5 mL) was added to the mixture. The mixture was heated at 150 °C for 16 h and cooled to

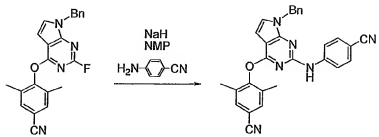
room temperature. The reaction was poured into ice water and extracted with EtOAc (2 x 50 mL). The combined organic solution was washed with H_2O (50 mL) and brine (50 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 1.12 mg (83%) of 4-(2-amino-7-benzyl-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile.

Step B:



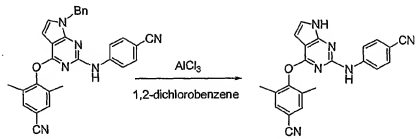
4-(7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile. To 4-(2-amino-7-benzyl-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile (70 mg, 0.19 mmol) in a polyethylene flask at -50 °C under argon was added 60% HF in pyridine (12 mL). To the solution was added tert-butylnitrite (0.068 mL, 0.57 mmol) dropwise for 5 min. The reaction was warmed to -40 °C and stirred for 30 min at the temperature. The reaction was then diluted with $CHCl_3$ (100 mL) and poured into K_2CO_3 (3 g) in a beaker. Ice water (50 mL) was carefully added. The $CHCl_3$ layer was separated, washed with aqueous $NaHCO_3$ solution (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 36 mg (51%) of 4-(7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile.

Step C:



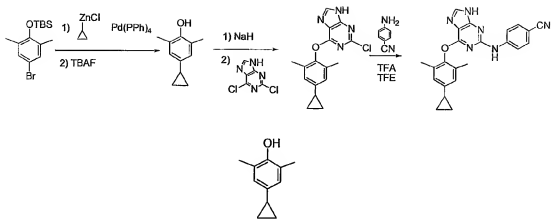
4-[7-benzyl-2-(4-cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile. To a solution of 4-aminobenzonitrile (54 mg, 0.46 mmol) in 1-methyl-2-pyrridone (1 mL) was added NaH (18 mg, 0.46 mmol). The reaction mixture was stirred at room temperature for 15 min and a solution of 4-(7-benzyl-2-fluoro-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy)-3,5-dimethyl-benzonitrile (34 mg, 0.091 mmol) in 1-methyl-2-pyrridone (1 mL) was added to the mixture. The mixture was stirred at room temperature for 1 h, poured into ice water and extracted with EtOAc (2 x 20 mL). The combined organic solution was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 28 mg (65%) of 4-[7-benzyl-2-(4-cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile.

Step D:

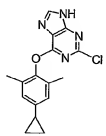


4-[2-(4-Cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile. To a solution of 4-[7-benzyl-2-(4-cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile (28 mg, 0.060 mmol) in 1,2-dichlorobenzene (1 mL) was added aluminum chloride (40 mg, 0.30 mmol). The reaction mixture was stirred at 160 °C for 45 min and cooled to room temperature. The mixture was poured into ice water and extracted with CH_2Cl_2 (2 x 10 mL). The combined organic solution was washed with brine (10 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 50:50) yielded 6 mg (27%) of 4-[2-(4-cyano-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-4-yloxy]-3,5-dimethyl-benzonitrile as a tan solid.

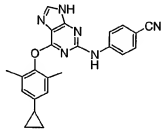
Example 6



4-Cyclopropyl-2,6-dimethylphenol. To a suspension of (4-bromo-2,6-dimethylphenoxy) tert-butyldimethylsilane (668 mg, 2.12 mmol) and tetrakis(triphenylphosphine)palladium (122 mg, 0.11 mmol) in THF (20 mL) was added cyclopropyl zinc chloride (28.0 mL, 11.2 mmol). The mixture was heated at 80°C for 24 h and cooled to room temperature. The reaction was passed through a short pad of SiO_2 to remove the catalyst and the solution was concentrated to oil. The resulting oil was diluted in EtOAc (100 mL), washed with brine (100 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 90:10) yielded 370 mg (63%) of tert-butyl(4-cyclopropyl-2,6-dimethylphenoxy)dimethylsilane. To tert-butyl(4-cyclopropyl-2,6-dimethylphenoxy)dimethylsilane (320 mg, 1.16 mmol) in THF (10 mL) was added a solution of tetrabutylammonium fluoride (5.0 mL, 1 M in THF, 5.0 mmol) and acetic acid (0.40 mL). The reaction was stirred at room temperature for 3 h and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 85:15) yielded 175 mg (93%) of 4-cyclopropyl-2,6-dimethylphenol as a light yellow oil.

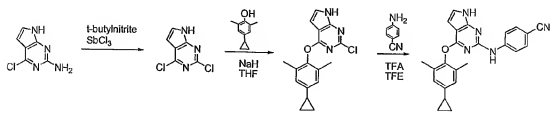


2-chloro-6-(4-cyclopropyl-2,6-dimethylphenoxy)-9H-purine. To a solution of 4-cyclopropyl-2,6-dimethylphenol (263 mg, 1.62 mmol) in 1-methyl-2-pyrridone (3 mL) at 0°C was added NaH (65 mg, 1.62 mmol). The reaction mixture was stirred at room temperature for 30 min and a solution of 2,6-dichloropurine (102 mg, 0.54 mmol) in 1-methyl-2-pyrridone (2 mL) was added to the mixture. The mixture was heated at 100°C for 16 h and then cooled to room temperature. The reaction was poured into ice water and extracted with $CHCl_3$ (3 x 20 mL). The combined organic solution was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (MeOH:$CHCl_3$ = 5:95) yielded 114 mg (67%) of 2-chloro-6-(4-cyclopropyl-2,6-dimethylphenoxy)-9H-purine.

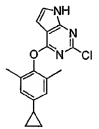


4-(6-(4-cyclopropyl-2,6-dimethylphenoxy)-9H-purin-2-ylamino)benzonitrile. To a suspension of 2-chloro-6-(4-cyclopropyl-2,6-dimethylphenoxy)-9H-purine (28 mg, 0.088 mmol) and 4-aminobenzonitrile (42 mg, 0.35 mmol) in 2,2,2-trifluoroethanol (3 mL) in a sealed tube was added trifluoroacetic acid (0.056 mL, 0.70 mmol). The resulting solution was heated at 90°C for 3 days. The reaction was cooled to room temperature and concentrated to dryness. Silica gel chromatography (CH_2Cl_2:Acetone = 80:20) yielded 7 mg (20%) of 4-(6-(4-cyclopropyl-2,6-dimethylphenoxy)-9H-purin-2-ylamino)benzonitrile as a light yellow solid.

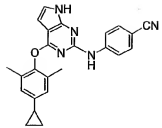
Example 7



2,4-dichloro-7H-pyrrolo[2,3-d]pyrimidine. To a suspension of 4-chloro-7H-pyrrolo[2,3-d]pyrimidin-2-ylamine (500 mg, 2.97 mmol) in 1,2-dichloroethane (40 mL) at -10°C under argon was added antimony chloride (750 mg, 3.29 mmol). After stirring for 5 min, tert-butylnitrite (2.50 mL, 20.8 mmol) was added to the solution. The reaction was stirred at -10°C for 3 h. The reaction was diluted with $CHCl_3$ (100 mL) and poured into ice water (50 mL). The $CHCl_3$ layer was separated, washed with brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 50:50) yielded 239 mg (43%) of 2,4-dichloro-7H-pyrrolo[2,3-d]pyrimidine as a tan solid.



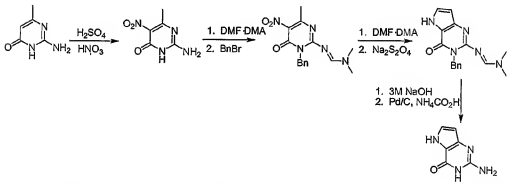
2-chloro-4-(4-cyclopropyl-2,6-dimethylphenoxy)-7H-pyrrolo[2,3-d]pyrimidine. To a solution of 4-cyclopropyl-2,6-dimethylphenol (259 mg, 1.60 mmol) in THF (3 mL) at 0°C was added NaH (64 mg, 1.60 mmol). The reaction mixture was stirred at room temperature for 30 min and a solution of 2,4-dichloro-7H-pyrrolo[2,3-d]pyrimidine (100 mg, 0.53 mmol) in THF (2 mL) was added to the mixture. The mixture was heated at 80°C for 16 h and cooled to room temperature. The reaction was poured into ice water and extracted with $CHCl_3$ (3 x 20 mL). The combined organic solution was washed with H_2O (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (Hexanes:EtOAc = 75:25) yielded 79 mg (48%) of 2-chloro-4-(4-cyclopropyl-2,6-dimethylphenoxy)-7H-pyrrolo[2,3-d]pyrimidine as a tan solid.



4-(4-(4-cyclopropyl-2,6-dimethylphenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino)benzonitrile. To a suspension of 2-chloro-4-(4-cyclopropyl-2,6-dimethylphenoxy)-7H-pyrrolo[2,3-d]pyrimidine (75 mg, 0.24 mmol) and 4-aminobenzonitrile (113 mg, 0.96 mmol) in 2,2,2-trifluoroethanol (4 mL) in a sealed tube was added trifluoroacetic acid (0.15 mL, 1.92 mmol). The resulting solution was heated at 90°C for 3 days. The reaction was diluted with EtOAc (50 mL), washed with $NaHCO_3$ (20 mL) and brine (20 mL), dried with Na_2SO_4, and concentrated to dryness. Silica gel chromatography (CH_2Cl_2:Acetone = 90:10) yielded 15 mg (16%) of 4-(4-(4-cyclopropyl-2,6-dimethylphenoxy)-7H-pyrrolo[2,3-d]pyrimidin-2-ylamino)benzonitrile as a tan solid.

Example 8

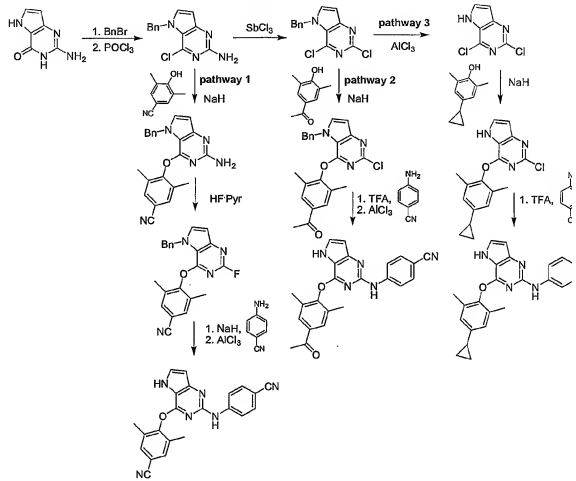
Scheme 1



Scheme 1 illustrate the synthesis of 9-deazaguanine by starting with commercially available 2-amino-6-methylpyrimidin-4(3*H*)-one and nitrated with nitric acid followed by treatment of the nitrated product with *N,N*-dimethylformamide dimethyl acetal (DMF-DMA) to afford the corresponding 2-(dimethylamino)methyleneimino derivative. It was then benzylated to produce 3-benzyl-2-[(dimethylamino)methyleneimino]-5-nitro-6-methylpyrimidin-4-one by treating with benzyl bromide and converted to benzylated-2,6-bis-dimethylaminomethylene derivative with DMF-DMA. Reductive cyclization with sodium

hydrosulfite followed by de-protection with 3M NaOH and de-benzylation with Pd/C and NH_4CO_2H afforded 9-deazaguanine.

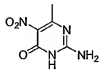
Scheme 2



Scheme 2 illustrates the 3 different pathways which provide the various substituted 9-deazapurines. Other products are synthesized by analogous methods, which a person skilled in the art could formulate, based on the reaction sequences given above. In certain cases, the person skilled in the art would see that protecting groups might be necessary. The synthetic scheme can be summarized as follows.

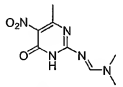
Benzylation of 9-deazaguanine followed by chlorination with $POCl_3$ gives the chlorinated 9-deazapurine product. This chlorinated intermediate can either be coupled with R2 (pathway 1) followed by diazotization with *t*-butyl nitrite; displaced with F; coupled with R3 and de-benzylated to give the product; or it can undergo pathway 2, which is diazotization

with *t*-butyl nitrite in the presence of antimony chloride followed by coupling with R2 and R3, followed by de-benzylation to afford the final product. Alternatively, pathway 3 provides for de-benzylation of the dichloro-9-deazapurine followed by the coupling with R2 and R3 respectively to provide the various substituted 9-deazapurine.



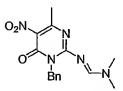
2-Amino-6-methyl-5-nitropyrimidin-4(3*H*)-one

To a mixture of 2-amino-6-methylpyrimidin-4(3*H*)-one (50 g, 0.4 mol) in 250 mL of H_2SO_4 at 0 °C was added 40 mL of HNO_3 with an additional funnel. After being stirred at room temperature for 3 h, the reaction mixture was slowly poured into 3.6 L of diethyl ether and stirred for 15 min. Decant the ether solution and added 1.0 L of ethyl acetate to the solid and stirred for 10 h. The solid (54.8 g, 81% yield) was filtered and used for next step without any further purification.



(E)-*N*,*N*-Dimethyl-*N'*-(4-methyl-5-nitro-6-oxo-1,6-dihydropyrimidin-2-yl)formimidamide

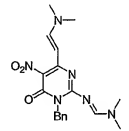
To a suspension of 2-Amino-6-methyl-5-nitropyrimidin-4(3*H*)-one (54.8 g, 0.32 mol) in CH_2Cl_2 (461 mL) was added DMF-dimethylacetal (103.1 mL, 0.77 mol) and stirred at room temperature for 1.5 h. The reaction mixture was filtered, washed with CH_2Cl_2, and used for the next step without further purification (31.9 g, 44% yield).



(E)-*N'*(1-benzyl-4-methyl-5-nitro-6-oxo-1,6-dihydropyrimidin-2-yl)-*N*,*N*-dimethylformimidamide

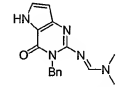
To a suspension of (E)-*N*,*N*-Dimethyl-*N'*-(4-methyl-5-nitro-6-oxo-1,6-dihydropyrimidin-2-yl)formimidamide (53.4 g, 0.24 mmol) in DMF (690 mL) was added DBU (44.6 mL, 0.30 mol) and benzyl bromide (44.4 mL, 0.29 mol) and stirred at room

temperature for 1 h. The excess of DBU was neutralized with HCl, and the mixture was concentrated *in vacuo*. The residue was dissolved in methylene chloride and extracted twice with 2M HCl and water, then dried over Na_2SO_4 and concentrated. Trituration with ethanol afforded the crystalline product which was washed with ethanol to give the product (64.7 g, 86% yield) and used in the next step without further purification.



(E)-*N'*-(1-benzyl-4-((E)-2-(dimethylamino)vinyl)-5-nitro-6-oxo-1,6-dihydropyrimidin-2-yl)-*N,N*-dimethylformimidamide

To a solution of (E)-*N'*(1-benzyl-4-methyl-5-nitro-6-oxo-1,6-dihydropyrimidin-2-yl)-*N,N*-dimethylformimidamide (64.7 g, 0.2 mol) in DMF (254 mL) was added DMF-dimethylacetal (54.5 mL, 0.41 mol). The reaction mixture was stirred for 3 h at 65 °C, cooled, and the solvent was removed under reduced pressure. The residue was triturated with ethanol, and the solid was collected by vacuum filtration (69.2 g, 91%) and used in the next step without further purification.



(E)-*N'*-(3-benzyl-4-oxo-4,5-dihydro-3*H*-pyrrolo[3,2-d]pyrimidin-2-yl)-*N,N*-dimethylformimidamide

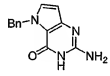
To a mixture of (E)-*N'*-(1-benzyl-4-((E)-2-(dimethylamino)vinyl)-5-nitro-6-oxo-1,6-dihydropyrimidin-2-yl)-*N,N*-dimethylformimidamide (43.0 g, 0.12 mol) in THF (151 mL) was added an aqueous saturated solution of $Na_2S_2O_4$ and stirred at room temperature overnight. Upon completion of the reaction, the solid was filtered and washed with THF to afford the product (21.2 g, 62% yield) which was used in the next step without further purification.

2-Amino-3-benzyl-3*H*-pyrrolo[3,2-*d*]pyrimidin-4(5*H*)-one

To a mixture of (E)-*N'*-(3-benzyl-4-oxo-4,5-dihydro-3*H*-pyrrolo[3,2-*d*]pyrimidin-2-yl)-*N*,*N*-dimethylformimidamide (21.2 g, 0.07 mol) in MeOH (382 mL) was added 3M NaOH (276 mL) and heated at 100 °C for 5 h. After completion of the reaction, the reaction mixture was cooled to 0 °C. The solid was filtered (15.8 g, 91%) and used in the next step without further purification.

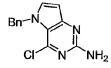
2-Amino-3*H*-pyrrolo[3,2-*d*]pyrimidin-4(5*H*)-one

To a mixture of 2-amino-3-benzyl-3*H*-pyrrolo[3,2-*d*]pyrimidin-4(5*H*)-one (10 g, 0.04 mol) in MeOH (334 mL) was added 10% Pd/C (2 g), ammonium formate (13.2 g, 0.21 mmol) and heated at 75°C for 4 h. After completion of the reaction, the reaction mixture was cooled and filtered through a pad of Celite with hot 1:1 DMF/MeOH. The filtrate was concentrated *in vacuo* to provide the product as an off-white solid (6.2 g, 99%).



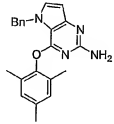
2-Amino-5-benzyl-3*H*-pyrrolo[3,2-*d*]pyrimidin-4(5*H*)-one

To a suspension of 2-amino-3*H*-pyrrolo[3,2-*d*]pyrimidin-4(5*H*)-one (336.7 mg, 2.0 mmol) in CH_2Cl_2 (14.3 mL) was added benzyl bromide (0.26 mL, 2.2 mmol) and TBABr (644 mg, 2.0 mmol). The reaction mixture was cooled to 0 °C, and to it was added 50% NaOH (1.7 mL). The resulting mixture was stirred for 2 h as it warmed from 0 °C to room temperature. Water was then added, and the solution was washed with $CHCl_3$. The combined organic layers were washed with brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. Purification by column chromatography, eluting with CH_2Cl_2/Acetone (5:1-1:1), afforded the product as a tan solid (423 mg, 82%)



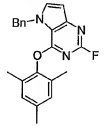
5-benzyl-4-chloro-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine

A mixture of 2-amino-5-benzyl-3*H*-pyrrolo[3,2-*d*]pyrimidin-4(5*H*)-one (1.1 g, 7.4 mmol) and $POCl_3$ (7 mL, 74 mmol) was heated at 116 °C for 3 h. Upon completion of the reaction, the reaction mixture was poured into ice and extracted three times with ethyl acetate. The combined organic layers were washed with brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. Purification by column chromatography, eluting with CH_2Cl_2/Acetone (3:1), afforded the product as a white solid (490 mg, 40%).



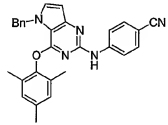
5-benzyl-4-(mesityloxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine

To a stirred suspension of NaH (56 mg, 2.33 mmol) in dry NMP (2 mL) was added 2,4,6-trimethyl phenol (317 mg, 2.33 mmol). The mixture was stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 5-benzyl-4-chloro-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine (200 mg, 0.78 mmol) in dry NMP (1.5 mL) and the resulting solution was heated at 90 °C for 16 h. After completion of the reaction, the reaction mixture was diluted with water and washed with EtOAc. The combined organic layers were washed with water, 2% NaOH, and brine and dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by column chromatography, eluting with hexanes/ethyl acetate (3:1) to give the product as a white solid (140 mg, 50%).



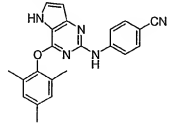
5-benzyl-2-fluoro-4-(mesityloxy)-5*H*-pyrrolo[3,2-*d*]pyrimidine

A solution of 5-benzyl-4-(mesityloxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine (139.9 mg, 0.39 mmol) in pyridine (1.6 mL) was cooled to -50 °C and HF-pyr (8 mL) and *t*-butyl nitrite (0.19 mL, 1.56 mmol) was added dropwise. The reaction mixture was stirred at 50 °C to -30 °C for 1.5 h. Upon completion of the reaction, the reaction mixture was poured into K_2CO_3 (5 g), slowly added water and washed with $CHCl_3$ x 3. The combined organic layers were washed with brine, dried (Na_2SO_4), filtered and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography, eluting with hexanes/ethyl acetate (2:1) to give the product as a white solid (116 mg, 82%).



4-(5-benzyl-4-(mesityloxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

A stirred suspension of NaH (63.8 mg, 2.66 mmol) in dry NMP (1.5 mL) was added 4-aminobenzylnitrile (188 mg, 2.66 mmol) and stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 5-benzyl-2-fluoro-4-(mesityloxy)-5*H*-pyrrolo[3,2-*d*]pyrimidine (115 mg, 0.32 mmol) in dry NMP (1.7 mL) and stirred at room temperature for 2 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc 3 times. The combined organic layers were washed with water, NH_4Cl, water x 2, and brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by column chromatography, eluting with 1% MeOH:CH_2Cl_2, which afforded the product as a tan solid (120 mg, 80%).

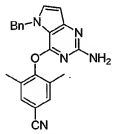


4-(4-(Mesityloxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

To a suspension of 4-(5-benzyl-4-(mesityloxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile (150 mg, 0.33 mmol) in 1,2-dichlorobenzene (13 mL) was added $AlCl_3$ (436 mg, 3.27 mmol). The reaction mixture was heated at 160 °C for 1.5 h during which the

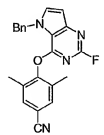
reaction mixture became dark and homogeneous. Upon completion of the reaction, the reaction mixture was cooled and washed with NH_4Cl. The combined organic layers were washed with brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by column chromatography, eluting with Hexanes:Ethyl acetate (5:1-1:1) provided the product as a tan solid (27.8 mg, 23%).

Example 9



4-(2-Amino-5-benzyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

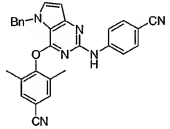
To a stirred suspension of NaH (155 mg, 6.47 mmol) in dry NMP (4 mL) was added 4-hydroxy-3,5-dimethylbenzonitrile (570 mg, 3.88 mmol), and the mixture was stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 5-benzyl-4-chloro-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine (400 mg, 1.55 mmol) in dry NMP (4 mL) and heated at 160 °C for 16 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc. The combined organic layers were washed with water, 2% NaOH, brine, dried over Na_2SO_4, filtered, and concentrated in vacuo. The crude product was purified by column chromatography, eluting with hexanes/ethyl acetate (2:1-1:4) to give the product as a light yellow solid (342 mg, 60%).



4-(5-benzyl-2-fluoro-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

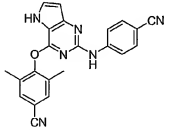
A solution of 4-(2-amino-5-benzyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile (319.4 mg, 0.87 mmol) in pyridine (3 mL) was cooled to -50 °C and

HF-pyr (15 mL) and *t*-butyl nitrite (0.42 mL, 3.46 mmol) were added dropwise. The reaction mixture was stirred at -50 °C to -20 °C for 1.5 h. Upon completion of the reaction, the mixture was poured into K_2CO_3 (8 g), diluted with water and washed with $CHCl_3$ x 3. The combined organic layers were washed with brine, dried (Na_2SO_4), filtered, and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography, eluting with hexanes/ethyl acetate (2:1-1:1) which same the product as a light yellow solid (314 mg, 97%).



4-(5-benzyl-2-(4-cyanophenylamino)-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

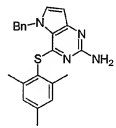
To a stirred suspension of NaH (101 mg, 4.21 mmol) in dry NMP (4 mL) was added 4-aminobenzylnitrile (299 mg, 2.53 mmol) and stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 4-(5-benzyl-2-fluoro-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile (314 mg, 0.84 mmol) in dry NMP (4.4 mL) and stirred at room temperature for 2 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc x 3. The combined organic layers were washed with water, NH_4Cl, water x 2, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by column chromatography, eluting with 1% MeOH:CH_2Cl_2, producing the product as a tan solid (320 mg, 80%).



4-(2-(4-Cyanophenylamino)-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

To a suspension of 4-(5-benzyl-2-(4-cyanophenylamino)-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile (240 mg, 0.51 mmol) in 1,2-dichlorobenzene (20 mL) was added $AlCl_3$ (681 mg, 5.1 mmol). The reaction mixture was heated at 160 °C for 1.5 h, during which time the reaction mixture became dark and homogeneous. Upon completion of the reaction, the reaction mixture was cooled and washed with NH_4Cl. The combined organic layers were washed with brine, dried over Na_2SO_4, filtered and concentrated *in vacuo*. The crude product was purified by preparative TLC TLC eluting with Hexanes:Ethyl acetate (2.5:1) and produced the product as a pink solid (51 mg, 26%).

Example 10

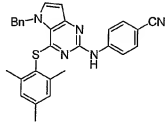


5-benzyl-4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine

To a stirred suspension of NaH (48 mg, 2 mmol) in dry NMP (2 mL) was added 2,4,6-trimethyl-benzene-1-thiol (191 mg, 1.2 mmol) The mixture was and stirred at room temperature for 30 min under argon. The reaction mixture was then added to a solution of 5-benzyl-4-chloro-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine (103 mg, 0.4 mmol) in dry NMP (2.5 mL) and heated at 60 °C for 16 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc. The combined organic layers were washed with water, 2% NaOH, and brine; dried over Na_2SO_4; filtered; and concentrated in vacuo. The crude product was purified by column chromatography, eluting with hexanes/ethyl acetate (2:1-1:3) to give the product as a light yellow solid (131 mg, 88%).

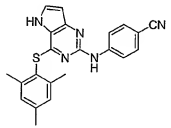
5-benzyl-2-fluoro-4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidine

A solution of 5-benzyl-4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine (131 mg, 0.35 mmol) in pyridine (1.6 mL) was cooled to -50 °C and added HF-pyr (8 mL) and *t*-butyl nitrite (0.17 mL, 1.4 mmol) dropwise. The reaction mixture was stirred at -50 °C to -40 °C for 1.5 h. Upon completion of the reaction, the reaction was poured into K_2CO_3 (5 g), slowly added water and washed with $CHCl_3$ x 3. The combined organic layers were washed with brine, dried (Na_2SO_4), filtered and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography, eluting with hexanes/ethyl acetate (5:1-1:1) to give the product as an off-white solid (94 mg, 71%).



4-(5-benzyl-4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

To a stirred suspension of NaH (30 mg, 1.25 mmol) in dry NMP (1.5 mL) was added 4-aminobenzylnitrile (87.4 mg, 0.74 mmol) and stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 5-benzyl-2-fluoro-4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidine (93 mg, 0.25 mmol) in dry NMP (1 mL) and stirred at room temperature for 2 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc x 3. The combined organic layers were washed with water, NH_4Cl, water x 2, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by preparative TLC TLC, eluting with Hexanes:Ethyl acetate (1.5:1) afforded the product as a tan solid (12.6 mg, 11%).



4-(4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

To a suspension of 4-(5-benzyl-4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile (9.2 mg, 0.03 mmol) in 1,2-dichlorobenzene (1 mL) was added $AlCl_3$

(26 mg, 0.3 mmol). The reaction mixture was heated at 160 °C for 1.5 h, which the reaction mixture became dark and homogeneous. Upon completion of the reaction, the reaction mixture was cooled and washed with NH_4Cl. The combined organic layers were washed with brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by preparative TLC TLC, eluting with Hexanes:Ethyl acetate (2.5:1) produced the product as a pink solid (7.7 mg, 20%).

Example 11

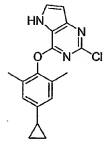
5-benzyl-2,4-dichloro-5*H*-pyrrolo[3,2-*d*]pyrimidine

To a suspension of 5-benzyl-4-chloro-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-amine (641 mg, 2.5 mmol) in 1,2-dichloroethane (35 mL) was cooled to -10 °C $SbCl_3$ (850 mg, 3.7 mmol) was added. The reaction mixture was stirred for 5 min. *t*-butyl nitrite (2.1 mL, 17.4 mmol) was added dropwise and the stirred mixture was from -10 °C to room temperature for 5 h. Upon completion of the reaction, the reaction mixture was poured into ice water and washed with CH_2Cl_2. The combined organic layers were washed with brine, dried over Na_2SO_4, filtered and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography eluting with Hexanes:Ethyl acetate (9:1-1:1), and gave the product as an off-white solid (528 mg, 77%).

2,4-Dichloro-5*H*-pyrrolo[3,2-*d*]pyrimidine

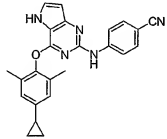
To a suspension of 5-benzyl-2,4-dichloro-5*H*-pyrrolo[3,2-*d*]pyrimidine (177 mg, 0.64 mmol) in 1,2-dichlorobenzene (20 mL) was added $AlCl_3$ (852 mg, 6.4mmol). The reaction mixture was heated at 160 °C for 1.5 h, during which the reaction mixture became dark and homogeneous. Upon completion of the reaction, the reaction mixture was cooled, added $CHCl_3$ and washed with NH_4Cl. The combined organic layers were washed with brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. Added Hexanes and filtered off the

product as purple solids (100 mg, 80%) and used for the next step without further purification.



2-Chloro-4-(4-cyclopropyl-2,6-dimethylphenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidine

To a stirred suspension of NaH (25 mg, 0.64 mmol) in dry NMP (1.5 mL) was added 4-cyclopropyl-2,6-dimethylphenol (103 mg, 0.64 mmol) and the resolution mixture was stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 2,4-dichloro-5*H*-pyrrolo[3,2-*d*]pyrimidine (120 mg, 0.64 mmol) in dry NMP (1.7 mL) and heated at 90 °C for 16 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc. The combined organic layers were washed with water, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by column chromatography, eluting with hexanes/ethyl acetate (4:1-2:1), to give the product as a light yellow solid (20.2 mg, 8%).

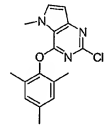


4-(4-(4-Cyclopropyl-2,6-dimethylphenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

In a sealed tube was placed 2-chloro-4-(4-cyclopropyl-2,6-dimethylphenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidine (20 mg, 0.064 mmol), 4-aminobenzonitrile (31 mg, 0.26 mmol), TFE (0.21 mL) and TFA (0.04 mL, 0.51 mmol). The reaction mixture was stirred at 90 °C for 16 h. Upon completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc. The combined organic layers were washed with $NaHCO_3$, brine, dried

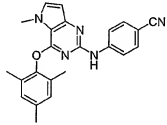
over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by preparative TLC TLC, eluting with 5 % Acetone/CH_2Cl_2 to give the product as a light yellow solid (10.5 mg, 45%).

Example 12



2-Chloro-4-(mesityloxy)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidine

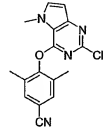
To a stirred suspension of NaH (8.9 mg, 0.22 mmol) in dry NMP (1.0 mL) was added 2,4,6-trimethyl phenol (30.2 mg, 0.22 mmol) and stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 2,4-dichloro-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidine (44.6 mg, 0.22 mmol) in dry NMP (1.0 mL) and heated at 90 °C for 16 h. After completion of the reaction, the resulting mixture was cooled, diluted with water and washed with EtOAc. The combined organic layers were washed with water, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by column chromatography, eluting with hexanes/ethyl acetate (5:1-2:1), to give the product as a light yellow solid (52.7 mg, 80%).



4-(4-(Mesityloxy)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

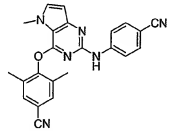
In a sealed tube was added 2-chloro-4-(mesityloxy)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidine (52.7 mg, 0.18 mmol), 4-aminobenzonitrile (83 mg, 0.70 mmol), TFE (1.0 mL) and TFA (0.11 mL, 1.44 mmol). The reaction mixture was stirred at 90 °C for 48 h. Upon completion of the reaction, the resulting mixture was cooled, diluted with water and washed

with EtOAc. The combined organic layers were washed with $NaHCO_3$, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by preparative TLC, eluting with hexanes:ethyl acetate (5:1-2:1), to give the product as a light yellow solid (65.7 mg, 95%).



4-(2-Chloro-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

To a stirred solution of NaH (42.1 mg, 1.05 mmol) in dry NMP (2.5 mL) was added 4-hydroxy-3,5-dimethylbenzonitrile (154.7 mg, 1.05 mmol) and stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 2,4-dichloro-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidine (211.3 mg, 1.05 mmol) in dry NMP (2.7 mL) and heated at 160 °C for 16 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc. The combined organic layers were washed with water, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by column chromatography, eluting with hexanes/ethyl acetate (3:1-1:1), to give the product as a light yellow solid (294 mg, 85%).

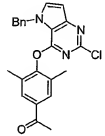


4-(2-(4-Cyanophenylamino)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

In a sealed tube was added 4-(2-chloro-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile (294 mg, 0.94 mmol), 4-aminobenzonitrile (455 mg, 3.77 mmol), TFE (3.1 mL) and TFA (0.58 mL, 7.52 mmol). The reaction mixture was stirred at 90 °C for 48 h. Upon completion of the reaction, the resulting mixture was cooled, diluted

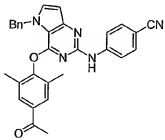
with water and washed with EtOAc. The combined organic layers were washed with $NaHCO_3$, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by preparative TLC, eluting with hexanes:ethyl acetate (4:1-1:2), to give the product as an off-white solid (133 mg, 40%).

Example 13



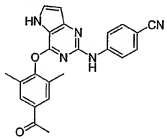
1-(4-(5-benzyl-2-chloro-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylphenyl)ethanone

To a stirred solution of NaH (31 mg, 0.78 mmol) in dry NMP (2 mL) was added 1-(4-hydroxy-3,5-dimethylphenyl)ethanone (127 mg, 0.78 mmol) and stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 5-benzyl-2,4-dichloro-5*H*-pyrrolo[3,2-*d*]pyrimidine (216 mg, 0.78 mmol) in dry NMP (2.4 mL) and heated at 160 °C for 16 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc. The combined organic layers were washed with water, 2% NaOH, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by column chromatography, eluting with hexanes/ethyl acetate (4:1-2:1), to give the product as a light yellow solid (111 mg, 35%).



4-(4-(4-Acetyl-2,6-dimethylphenoxy)-5-benzyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

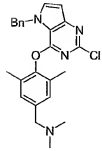
In a sealed tube was added 1-(4-(5-benzyl-2-chloro-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylphenyl)ethanone (111 mg, 0.27 mmol), 4-aminobenzonitrile (129 mg, 1.1 mmol), TFE (1.7 mL) and TFA (0.2 mL, 2.16 mmol). The reaction mixture was stirred at 90 °C for 16 h. Upon completion of the reaction, the resulting mixture was cooled, diluted with water, and washed with EtOAc. The combined organic layers were washed with $NaHCO_3$ and brine; dried over Na_2SO_4; filtered; and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography, eluting with hexanes:ethyl acetate (9:1-100 % EtOAc), to give the product as an off-white solid (68 mg, 51%).



4-(4-(4-Acetyl-2,6-dimethylphenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

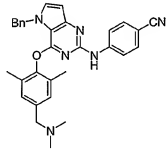
To a suspension of 4-(4-(4-acetyl-2,6-dimethylphenoxy)-5-benzyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile (65 mg, 0.13 mmol) in 1,2-dichlorobenzene (5.3 mL) was added $AlCl_3$ (178 mg, 1.3 mmol). The reaction mixture was heated at 160 °C for 1.5 h, after which time the reaction mixture became dark and homogeneous. Upon completion of the reaction, the reaction mixture was cooled, $CHCl_3$ was added, and the mixture was washed with NH_4Cl. The combined organic layers were washed with brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography, eluting with hexanes:ethyl acetate (3:1), to give the product as a brown solid (41 mg, 77%).

Example 14



1-(4-(5-benzyl-2-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylphenyl)-*N*,*N*-dimethylmethanamine

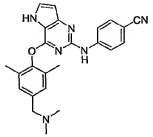
To a stirred solution of NaH (80.4 mg, 1.0 mmol) in dry NMP (3 mL) was added 4-((dimethylamino)methyl)-2,6-dimethylphenol (216.4 mg, 1.0 mmol) and the mixture was stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 5-benzyl-2,4-dichloro-5*H*-pyrrolo[3,2-*d*]pyrimidine (216 mg, 0.78 mmol) in dry NMP (2.6 mL) and heated at 120 °C for 16 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc. The combined organic layers were washed twice with water, washed with, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography, eluting with MeOH/CH_2Cl_2 (10%-30%), to give the product as a tan solid (71 mg, 17%).



4-(5-benzyl-4-(4-((dimethylamino)methyl)-2,6-dimethylphenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

In a sealed tube was added 1-(4-(5-benzyl-2-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylphenyl)-*N*,*N*-dimethylmethanamine (70.7 mg, 0.17 mmol), 4-aminobenzonitrile (78.9 mg, 0.67 mmol), TFE (1.1 mL) and TFA (0.1 mL, 1.3 mmol). The reaction mixture was stirred at 90 °C for 16 h. Upon completion of the reaction, the resulting mixture was cooled, diluted with water, and washed with EtOAc. The combined organic layers were washed with $NaHCO_3$ solution and with brine, dried over Na_2SO_4, filtered, and concentrated

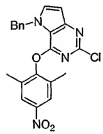
in vacuo. The crude product was purified by silica gel column chromatography, eluting with $MeOH/CH_2Cl_2$ (20%-40%), to give the product as a tan solid (17 mg, 20%).



4-(4-(4-((dimethylamino)methyl)-2,6-dimethylphenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

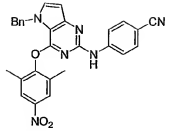
The benzyl group was removed according to the same procedure as described for example **13**.

Example 15



5-benzyl-2-chloro-4-(2,6-dimethyl-4-nitrophenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidine

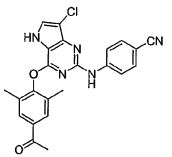
To a stirred solution of NaH (61.9 mg, 2.6 mmol) in dry NMP (4.7 mL) was added 2,6-dimethyl-4-nitrophenol (258.9 mg, 1.55 mmol) and stirred at room temperature for 30 min under argon. The reaction mixture was added to a solution of 5-benzyl-2,4-dichloro-5*H*-pyrrolo[3,2-*d*]pyrimidine (431 mg, 1.55 mmol) in dry NMP (4 mL) and heated at 90 °C for 16 h. After completion of the reaction, the resulting mixture was diluted with water and washed with EtOAc. The combined organic layers were washed twice with water, washed with brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography, eluting with hexanes:ethyl acetate (3:1-1:1), to give the product as a white solid (598 mg, 94%).



4-(5-benzyl-4-(2,6-dimethyl-4-nitrophenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

In a sealed tube was added 5-benzyl-2-chloro-4-(2,6-dimethyl-4-nitrophenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidine (598 mg, 1.46 mmol), 4-aminobenzonitrile (691 mg, 5.85 mmol), TFE (9.1 mL) and TFA (1.97 mL, 11.7 mmol). The reaction mixture was stirred at 90 °C for 16 h. Upon completion of the reaction, the resulting mixture was cooled, diluted with water and washed with EtOAc. The combined organic layers were washed with $NaHCO_3$, brine, dried over Na_2SO_4, filtered, and concentrated *in vacuo*. The crude product was purified by silica gel column chromatography, eluting with hexanes:ethyl acetate (3:1-1:1), to give the product (442 mg, 60%).

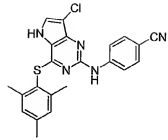
Example 16



4-(4-(4-Acetyl-2,6-dimethylphenoxy)-7-chloro-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

To a solution of 4-(4-(4-acetyl-2,6-dimethylphenoxy)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile (13 mg, 0.03 mmol) in CH_2Cl_2 (1 mL) was added NCS (4.4 mg, 0.03 mmol) and the mixture refluxed for 16 h. After the completion of the reaction, the solvent was concentrated and purified by preparative TLC eluting with hexanes:ethyl acetate (2:1) to give the product (4.2 mg, 30%).

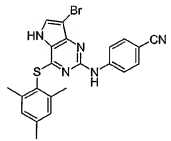
Example 17



4-(7-Chloro-4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

To a solution of 4-(4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile (10 mg, 0.02 mmol) in CH_2Cl_2 (5 mL) was added NCS (2.8 mg, 0.02 mmol) and the resolution mixture refluxed for 16 h. After the completion of the reaction, the solvent was concentrated and purified by preparative TLC, eluting with hexanes:ethyl acetate (3:1), to give the product (8.8 mg, 88%).

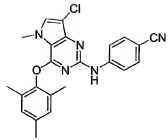
Example 18



4-(7-bromo-4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

To a solution of 4-(4-(mesitylthio)-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile (22.7 mg, 0.06 mmol) in CH_2Cl_2 (10 mL) was added NBS (10.5 mg, 0.06 mmol) and the resultant mixture was refluxed for 16 h. After completion of the reaction, the solvent was concentrated and purified by reversed phase HPLC to give the product as a white solid (6.4 mg, 23%).

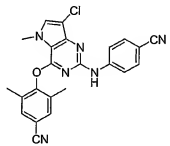
Example 19



4-(7-chloro-4-(mesityloxy)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile

To a solution of 4-(4-(mesityloxy)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-2-ylamino)benzonitrile (17.3 mg, 0.05 mmol) in CH_2Cl_2 (5 mL) was added NCS (6.03 mg, 0.05 mmol) and the resultant mixture was refluxed for 16 h. After completion of the reaction, the solvent was concentrated and purified by preparative TLC, eluting with hexanes:ethyl acetate (3:1), to give the product as an off-white solid (3.4 mg, 6%).

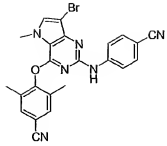
Example 20



4-(7-Chloro-2-(4-cyanophenylamino)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

To a solution of 4-(2-(4-cyanophenylamino)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile (21.5 mg, 0.06 mmol) in CH_2Cl_2 (3 mL) was added NCS (7.3 mg, 0.06 mmol) and the resultant mixture was refluxed for 16 h. After completion of the reaction, the solvent was concentrated and purified by preparative TLC, eluting with Hexanes:Ethyl acetate (3:1), to give the product as a light yellow solid (13.2 mg, 56%).

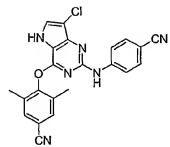
Example 21



4-(7-Bromo-2-(4-cyanophenylamino)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

To a solution of 4-(2-(4-cyanophenylamino)-5-methyl-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile (58 mg, 0.15 mmol) in CH_2Cl_2 (8 mL) was added NBS (29 mg, 0.16 mmol) and the resultant mixture was refluxed for 16 h. After completion of the reaction, the solvent was concentrated and purified by preparative TLC, eluting with hexanes:ethyl acetate (2:1), to give the product as a yellow solid (40 mg, 57%).

Example 22



4-(7-Chloro-2-(4-cyanophenylamino)-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile

To a solution of 4-(2-(4-cyanophenylamino)-5*H*-pyrrolo[3,2-*d*]pyrimidin-4-yloxy)-3,5-dimethylbenzonitrile (28.1 mg, 0.07 mmol) in CH_2Cl_2 (4 mL) was added NCS (9.9 mg, 0.07 mmol) and the resultant mixture was refluxed for 16 h. After completion of the reaction, the solvent was concentrated and purified by preparative TLC eluting with hexanes:ethyl acetate (2:1), to give the product as a pink solid (20 mg, 65%).

Biological Activity

Inhibition of HIV-1 Reverse Transcriptase

Numerous compounds were screened for inhibitory activity against human immunodeficiency virus type 1 (HIV-1) using a high throughput cell-based assay using HIV-1 expressing firefly luciferase as a reporter gene and pseudotyped with vesicular stomatitis virus envelope glycoprotein (VSV-G). Experimental procedures were essentially as described by Connor *et al.* in *Journal of Virology* (1996), 70: 5306-5311 (Characterization of the functional properties of env genes from long-term survivors of human immunodeficiency virus type 1 infection), and Popik *et al.* in *Journal of Virology* (2002), 76: 4709-4722 (Human immunodeficiency virus type 1 uses lipid raft-co-localized CD4 and chemokine receptors for productive entry into CD4+ T cells). It should be particularly appreciated that the virus contains two introduced mutations in the RT gene (K103N and Y181C, created by PCR mutagenesis) that render the virus highly resistant to current non-nucleoside HIV-1 drugs. Virus stocks were generated by cotransfection of plasmid DNA encoding VSV-G with vector pNL4-3Env(-)Luc(+) into 293T cells. Sixty-four hours after transfection, virus-containing medium was collected by centrifugation and stored frozen at –80° C.

HeLa cells were infected with the VSV-G pseudotyped virus in the presence of screening compounds in a 384-well microtiter plate format. Forty-eight hours after initial infection, lysis buffer and Luciferase Assay Reagent (Promega) was added to the cells and luciferase activity was determined by counting the resultant luminescence using a LJL luminometer. Since the luciferase gene is carried in the virus genome, its expression level directly reflects the virus replication level in the presence of a compound.

To evaluate the activity of the compounds against wild type HIV-1, the HeLa-JC53 cell line that expresses high levels of CD4 and CCR5 (see e.g., Platt *et al.* in *Journal of Virology* (1998), 72: 2855-2864: Effect of CCR5 and CD4 cell surface concentrations on infection by macrophagetropic isolates of human immunodeficiency virus type 1) was modified by isolation of a stable cell line that expresses luciferase under the control of the HIV-1 promoter (long terminal repeat, i.e., LTR). HIV-1 infection of this cell line stimulates the transcription of luciferase from the HIV-1 promoter and the luciferase gene expression level is proportional to the level of virus replication (Harrington *et al.* in *Journal of Virology*

Methods (2000), 88: 111-115: Direct detection of infection of HIV-1 in blood using a centrifugation-indicator cell assay; and Roos et al. in Virology (2000), 273: 307-315: LuSIV cells: a reporter cell line for the detection and quantitation of a single cycle of HIV and SIV replication). Procedures for virus infection, compound testing and luciferase activity determination were the same as for the VSV-G pseudotyped HIV-1.

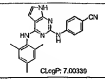
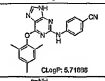
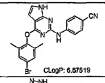
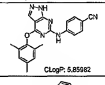
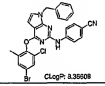
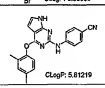
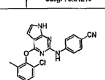
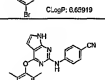
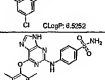
Two approaches were used to evaluate the cytotoxicity of the positive compounds discovered in the HIV-1 virus assays. The first approach employed another modified HeLa-JC53 cell line that constitutively expresses high level of luciferase without virus infection. The level of luciferase expression in these cells served as an indicator for cell replication in the presence of the compounds. Procedures for compound testing and luciferase activity determination were the same as for the virus infection tests. The other toxicity assay utilized HeLe-JC53 cells and a commercially available MTS assay kit (Promega) that measures the mitochondria function of the cells.

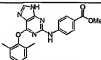
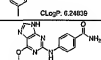
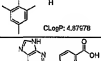
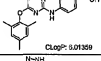
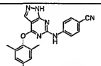
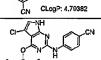
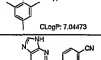
Results

The results are listed in Table A as EC50 (nM) and IC50 (nM). Table legend: A is < 10, B is between 10 and 100, C is > 100, ND is not determined. Note that many compounds of this invention exhibit activities on wild-type (WT) and resistant mutants below 10 nM.

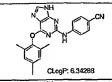
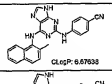
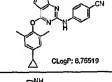
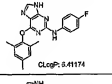
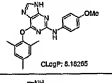
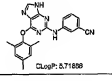
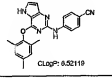
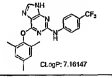
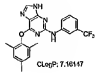
Table A

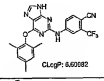
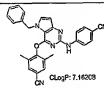
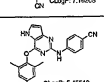
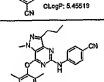
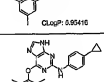
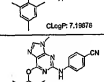
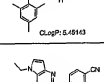
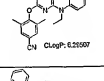
Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
1	 CLogP: 6.31119	A	B	B	B
2	 CLogP: 7.1042	A	B	B	C
3	 CLogP: 5.24519	A	A	A	A

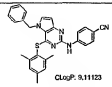
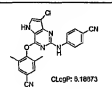
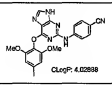
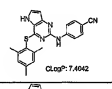
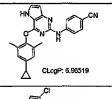
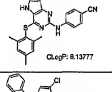
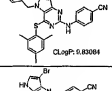
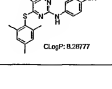
Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
4	 CLogP: 7.00339	A	B	B	B
5	 CLogP: 5.71696	A	A	A	A
6	 CLogP: 6.57519	A	B	B	B
7	 CLogP: 5.85982	A	A	B	B
8	 CLogP: 8.35608	B	C	C	C
9	 CLogP: 5.81219	A	C	C	C
10	 CLogP: 6.60919	A	B	B	B
11	 CLogP: 6.5252	A	B	A	B
12	 CLogP: 4.43468	B	C	C	C

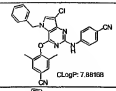
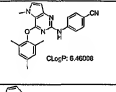
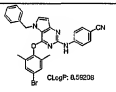
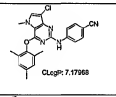
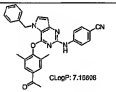
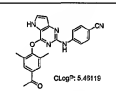
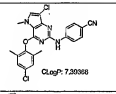
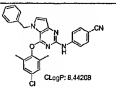
Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
13	 CLogP: 5.18409	A	A	A	A
14	 CLogP: 6.24839	A	C	C	C
15	 CLogP: 4.87678	B	C	C	C
16	 CLogP: 5.01359	C	C	C	C
17	 CLogP: 4.70382	A	B	A	B
18	 CLogP: 7.04473	B	C	C	C
19	 CLogP: 5.16288	A	A	A	B
20	 CLogP: 5.67338	A	B	C	C
21	 CLogP: 5.10988	A	B	B	C

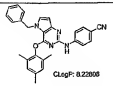
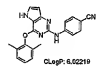
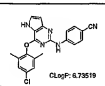
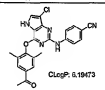
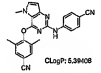
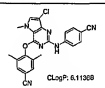
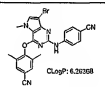
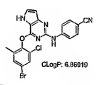
Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
22	 CLogP: 7.12036	A	C	C	C
23	 CLogP: 6.50036	A	A	A	B
24	 CLogP: 4.45545	B	C	C	C
25	 CLogP: 4.65288	A	A	A	B
26	 CLogP: 5.71308	A	B	B	C
27	 CLogP: 7.17134	A	B	B	B
28	 CLogP: 6.94438	A	A	B	B
29	 CLogP: 6.61638	A	C	C	C
30	 CLogP: 5.42063	C	C	C	C

Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
31	 CLogP: 6.34288	A	B	A	B
32	 CLogP: 6.67638	A	B	C	C
33	 CLogP: 6.76519	A	B	B	B
34	 CLogP: 6.41174	A	A	B	B
35	 CLogP: 6.18265	A	B	C	C
36	 CLogP: 5.71898	A	B	C	C
37	 CLogP: 6.52119	A	A	A	A
38	 CLogP: 7.16147	B	C	C	C
39	 CLogP: 7.16147	C	C	C	C

Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
40	 CLogP: 6.60082	B	B	C	B
41	 CLogP: 7.16208	A	A	B	B
42	 CLogP: 5.45519	A	A	A	A
43	 CLogP: 6.95416	B	B	C	B
44	 CLogP: 7.19878	B	C	C	C
45	 CLogP: 5.48143	A	A	A	B
46	 CLogP: 6.26507	C	C	C	C
47	 CLogP: 6.67208	B	B	C	C

Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
48	 CLogP: 9.11123	B	B	C	C
49	 CLogP: 5.16973	A	A	A	A
50	 CLogP: 4.02888	A	A	B	C
51	 CLogP: 7.4042	A	A	A	B
52	 CLogP: 5.95319	A	A	A	A
53	 CLogP: 6.13777	A	B	B	C
54	 CLogP: 9.83084	A	B	B	C
55	 CLogP: 8.28777	A	B	B	C

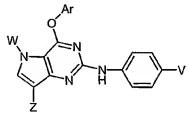
Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
56	 CLogP: 7.88168	B	B	B	B
57	 CLogP: 6.46008	A	A	A	A
58	 CLogP: 6.59208	B	B	C	C
59	 CLogP: 7.17968	B	B	B	B
60	 CLogP: 7.15696	A	A	B	B
61	 CLogP: 5.45116	A	A	A	A
62	 CLogP: 7.30368	A	A	A	A
63	 CLogP: 8.44208	B	B	C	C

Cpd	Structure	EC_{50} WT (nM)	EC_{50} Y181C (nM)	EC_{50} Y188L (nM)	EC_{50} L100I-K103N (nM)
64	 CLogP: 8.22808	A	B	C	C
65	 CLogP: 6.02219	A	A	A	C
66	 CLogP: 6.73519	A	A	A	A
67	 CLogP: 6.19473	A	A	B	A
68	 CLogP: 5.39408	A	A	A	A
69	 CLogP: 6.11368	A	A	A	A
70	 CLogP: 6.26368	A	A	A	A
71	 CLogP: 6.86910	A	A	A	A

Contemplated Compounds and Prophetic Examples

In addition to the examples listed above, this invention provides or contemplates many compounds, examples of which are shown in the tables that follow.

Table 1 Contemplated Compounds of Formula IA-1



IA-1

	Ar	V	W	Z
1.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	H	CH_3
2.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	benzyl	CH_3
3.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	benzyl	H
4.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	3-Me-benzyl	CH_3
5.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	4-Me-benzyl	H
6.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	3-MeO-benzyl	H
7.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	4-MeO-benzyl	CH_3
8.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	H	H
9.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	H	Br
10.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	cyclopropyl	CH_2CH_3
11.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	CH_2CF_3	CH_2CH_3
12.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	H	CH_3
13.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	benzyl	CH_3
14.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	benzyl	H
15.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	3-Me-benzyl	cyclopropyl
16.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	3-MeO-benzyl	benzyl
17.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	H	H
18.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	C≡CCH$_3$	CH_2CH_3	CH_3
19.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	Cl	$CH_2CH=CH_2$	H
20.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2CH_3	$CH_2CH=CH_2$	H
21.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	Cl	CH_2CH_3	CH_2CH_3
22.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	Cl	H	H
23.	4-cyclopropylnaphth-1-yl	CN	H	CH_3
24.	4-cyclopropylnaphth-1-yl	CN	benzyl	CH_3
25.	4-cyclopropylnaphth-1-yl	CN	benzyl	H
26.	4-cyclopropylnaphth-1-yl	CN	H	H
27.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	CH_3
28.	4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	CH_3
29.	4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	H
30.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	H
31.	4-cyclopropylnaphth-1-yl	SO_2NHCH_3	CH_2CN	F

	Ar	V	W	Z
32.	4-cyclopropylnaphth-1-yl	SO_2NHCH_3	cyclopropyl	Cl
33.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_2CH_2CN	Br
34.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_2CN	benzyl
35.	*o,o'-di*-CH_3O-*p*-CN-phenyl	C≡CCH_3	3-MeO-benzyl	F
36.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	3-Me-benzyl	Cl
37.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	CH_3
38.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	benzyl	CH_3
39.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	benzyl	H
40.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	H
41.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	CH_3
42.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	CH_3
43.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	H
44.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	H
45.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	CH_3
46.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	benzyl	CH_3
47.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	3,5-di MeO-benzyl	CH_3
48.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	benzyl	H
49.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	H
50.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	CH_3
51.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	CH_3
52.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	H
53.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	H
54.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	H	F
55.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	benzyl	F
56.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	benzyl	F
57.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	H	F
58.	4-cyclopropylnaphth-1-yl	CN	H	F
59.	4-cyclopropylnaphth-1-yl	CN	benzyl	F
60.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	F
61.	4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	F
62.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	F
63.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	benzyl	F
64.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	F
65.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	F
66.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	F
67.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	benzyl	F
68.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	F
69.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	F
70.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	H	CH_3
71.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	benzyl	CH_3
72.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	benzyl	H
73.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	H	H
74.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	H	CH_3
75.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	benzyl	CH_3
76.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	benzyl	H
77.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	H	H

	Ar	V	W	Z
78.	4-cyclopropylnaphth-l-yl	SO_2NH_2	H	CH_3
79.	4-cyclopropylnaphth-l-yl	SO_2NH_2	benzyl	CH_3
80.	4-cyclopropylnaphth-l-yl	SO_2NH_2	benzyl	H
81.	4-cyclopropylnaphth-l-yl	SO_2NH_2	H	H
82.	4-cyclopropylnaphth-l-yl	F	H	CH_3
83.	4-cyclopropylnaphth-l-yl	F	benzyl	CH_3
84.	4-cyclopropylnaphth-l-yl	F	benzyl	H
85.	4-cyclopropylnaphth-l-yl	F	H	H
86.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	CH_3
87.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	CH_3
88.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	H
89.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	H
90.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	CH_3
91.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	benzyl	CH_3
92.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	benzyl	H
93.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	H
94.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	CH_3
95.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	CH_3
96.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	3-Me-benzyl	CH_3
97.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NHCH_3	benzyl	H
98.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	H
99.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	H
100.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	CH_3
101.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	benzyl	CH_3
102.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	benzyl	H
103.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	H
104.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	H	F
105.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	benzyl	F
106.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	benzyl	F
107.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	H	F
108.	4-cyclopropylnaphth-l-yl	SO_2NH_2	H	F
109.	4-cyclopropylnaphth-l-yl	SO_2NH_2	benzyl	F
110.	4-cyclopropylnaphth-l-yl	F	H	F
111.	4-cyclopropylnaphth-l-yl	F	benzyl	F
112.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	F
113.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	F
114.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	F
115.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	benzyl	F
116.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	F
117.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	F
118.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	F
119.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	benzyl	F
120.	2,4,6-trimethyl phenyl	CN	H	CH_3
121.	2,4,6-trimethyl phenyl	CN	benzyl	CH_3
122.	2,4,6-trimethyl phenyl	CN	benzyl	H
123.	2,4,6-trimethyl phenyl	CN	H	H
124.	2,4,6-trimethyl phenyl	CH=CHCN	H	CH_3

	Ar	V	W	Z
125.	2,4,6-trimethyl phenyl	CH=CHCN	benzyl	CH_3
126.	2,4,6-trimethyl phenyl	CH=CHCN	benzyl	H
127.	2,4,6-trimethyl phenyl	CH=CHCN	H	H
128.	2,4,6-trimethyl phenyl	CN	H	F
129.	2,4,6-trimethyl phenyl	CN	benzyl	F
130.	2,4,6-trimethyl phenyl	CH=CHCN	H	F
131.	2,4,6-trimethyl phenyl	CH=CHCN	benzyl	F
132.	2,4,6-trimethyl phenyl	SO_2NH_2	H	CH_3
133.	2,4,6-trimethyl phenyl	SO_2NH_2	benzyl	CH_3
134.	2,4,6-trimethyl phenyl	SO_2NH_2	benzyl	H
135.	2,4,6-trimethyl phenyl	SO_2NH_2	H	H
136.	2,4,6-trimethyl phenyl	F	H	CH_3
137.	2,4,6-trimethyl phenyl	F	benzyl	CH_3
138.	2,4,6-trimethyl phenyl	F	benzyl	H
139.	4-cyclopropyl phenyl	F	H	H
140.	4-cyclopropyl phenyl	SO_2NH_2	H	F
141.	4-cyclopropyl phenyl	SO_2NH_2	benzyl	F
142.	4-cyclopropyl phenyl	F	H	F
143.	4-cyclopropyl phenyl	F	benzyl	F
144.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	CH_3
145.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	benzyl	CH_3
146.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	benzyl	H
147.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	H
148.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	CH_3
149.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	benzyl	CH_3
150.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	benzyl	H
151.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	H
152.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	F
153.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	benzyl	F
154.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	F
155.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	benzyl	F
156.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	CH_3
157.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	CH_3
158.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	H
159.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	H
160.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	CH_3
161.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	CH_3
162.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	H
163.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	H
164.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	F
165.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	F
166.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	F
167.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	F
168.	*o,o'*-diCH_3O-*p*-(CH=CHCN)phenyl	CN	CH_3	CH_3
169.	*o,o'*-diCH_3O-*p*-(CH=CHCN)phenyl	CN	cyclopropyl	CH_3
170.	*o,o'*-diCH_3O-*p*-(CH=CHCN)phenyl	CN	cyclopropyl	H
171.	*o,o'*-diCH_3O-*p*-(CH=CHCN)phenyl	CN	CH_3	H

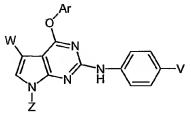
	Ar	V	W	Z
172.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	CH_3	CH_3
173.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	cyclopropyl	CH_3
174.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	cyclopropyl	H
175.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	CH_3	H
176.	4-cyclopropylnaphth-l-yl	CN	CH_3	CH_3
177.	4-cyclopropylnaphth-l-yl	CN	cyclopropyl	CH_3
178.	4-cyclopropylnaphth-l-yl	CN	cyclopropyl	H
179.	4-cyclopropylnaphth-l-yl	CN	CH_3	H
180.	4-cyclopropylnaphth-l-yl	CH=CHCN	CH_3	CH_3
181.	4-cyclopropylnaphth-l-yl	CH=CHCN	cyclopropyl	CH_3
182.	4-cyclopropylnaphth-l-yl	CH=CHCN	cyclopropyl	H
183.	4-cyclopropylnaphth-l-yl	CH=CHCN	CH_3	H
184.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	CH_3
185.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	CH_3
186.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	H
187.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	H
188.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
189.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	CH_3
190.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	H
191.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	H
192.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	CH_3
193.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	cyclopropyl	CH_3
194.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	cyclopropyl	H
195.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	H
196.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
197.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	CH_3
198.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	H
199.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	H
200.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	CH_3	F
201.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CN	cyclopropyl	F
202.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	cyclopropyl	F
203.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	CH_3	F
204.	4-cyclopropylnaphth-l-yl	CN	CH_3	F
205.	4-cyclopropylnaphth-l-yl	CN	cyclopropyl	F
206.	4-cyclopropylnaphth-l-yl	CH=CHCN	CH_3	F
207.	4-cyclopropylnaphth-l-yl	CH=CHCN	cyclopropyl	F
208.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	F
209.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	F
210.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	F
211.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	F
212.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	F
213.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	cyclopropyl	F
214.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	F
215.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	F
216.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	CH_3	CH_3
217.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	cyclopropyl	CH_3
218.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	cyclopropyl	H

	Ar	V	W	Z
219.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	CH_3	H
220.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NHCH_3	CH_3	CH_3
221.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	cyclopropyl	CH_3
222.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	cyclopropyl	H
223.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	CH_3	H
224.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	CH_3
225.	4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	CH_3
226.	4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	H
227.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	H
228.	4-cyclopropylnaphth-1-yl	F	CH_3	CH_3
229.	4-cyclopropylnaphth-1-yl	F	cyclopropyl	CH_3
230.	4-cyclopropylnaphth-1-yl	F	cyclopropyl	H
231.	4-cyclopropylnaphth-1-yl	F	CH_3	H
232.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
233.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NHCH_3	CH_3	CH_3
234.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	CH_3
235.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	H
236.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	H
237.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	CH_3
238.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	cyclopropyl	CH_3
239.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	cyclopropyl	H
240.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	H
241.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
242.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	CH_3
243.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	H
244.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	H
245.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	CH_3
246.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	cyclopropyl	CH_3
247.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	cyclopropyl	H
248.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	H
249.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	CH_3	F
250.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	cyclopropyl	F
251.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	cyclopropyl	F
252.	*o,o'-di*CH_3O-*p*-(CH=CHCN)phenyl	F	CH_3	F
253.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	F
254.	4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	F
255.	4-cyclopropylnaphth-1-yl	F	CH_3	F
256.	4-cyclopropylnaphth-1-yl	F	cyclopropyl	F
257.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	F
258.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	F
259.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	F
260.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	cyclopropyl	F
261.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	F
262.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	F
263.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	F
264.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	cyclopropyl	F
265.	4-cyclopropyl phenyl	CN	CH_3	CH_3

	Ar	V	W	Z
266.	2,4,6-trimethyl phenyl	CN	cyclopropyl	CH_3
267.	2,4,6-trimethyl phenyl	CN	cyclopropyl	H
268.	2,4,6-trimethyl phenyl	CN	CH_3	H
269.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	CH_3
270.	2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	CH_3
271.	2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	H
272.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	H
273.	2,4,6-trimethyl phenyl	CN	CH_3	F
274.	2,4,6-trimethyl phenyl	CN	cyclopropyl	F
275.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	F
276.	2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	F
277.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	CH_3
278.	2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	CH_3
279.	2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	H
280.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	H
281.	2,4,6-trimethyl phenyl	F	CH_3	CH_3
282.	2,4,6-trimethyl phenyl	F	cyclopropyl	CH_3
283.	2,4,6-trimethyl phenyl	F	cyclopropyl	H
284.	4-cyclopropyl phenyl	F	CH_3	H
285.	4-cyclopropyl phenyl	SO_2NH_2	CH_3	F
286.	4-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	F
287.	4-cyclopropyl phenyl	F	CH_3	F
288.	4-cyclopropyl phenyl	F	cyclopropyl	F
289.	2,4,6-trimethyl phenyl	CN	CH_3	CH_3
290.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	cyclopropyl	CH_3
291.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	cyclopropyl	H
292.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	H
293.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	CH_3
294.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	CH_3
295.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	H
296.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	H
297.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	F
298.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	cyclopropyl	F
299.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	F
300.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	F
301.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	CH_3
302.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	CH_3
303.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	H
304.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	H
305.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	CH_3
306.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	cyclopropyl	CH_3
307.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	cyclopropyl	H
308.	2,4,6-trimethyl phenyl	F	CH_3	H
309.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	F
310.	2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	F
311.	2,4,6-trimethyl phenyl	F	CH_3	F
312.	2,4,6-trimethyl phenyl	F	cyclopropyl	F

	Ar	V	W	Z
313.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	CH_3	H
314.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	H	H
315.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	CH_3	Cl
316.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	H	Cl

Table 2 Contemplated Compounds of Formula IA-2



	Ar	V	W	Z
1.	*o,o'*-diCH$_3$O-*p*-(CH=CHCN)-phenyl	CN	F	CH$_3$
2.	*o o'*-diCH$_3$O-*p*-(CH=CHCN)-phenyl	CN	benzyl	CH$_3$
3.	*o,o'*--diCH$_3$O-*p*-(CH=CHCN)-phenyl	CN	benzyl	H
4.	*o,o'*--diCH$_3$O-*p*-(CH=CHCN)-phenyl	CN	F	H
5.	*o,o'*-diCH$_3$O-*p*-(CH=CHCN)-phenyl	CH=CHCN	Cl	CH$_3$
6.	*o,o'*-diCH$_3$O-*p*-(CH=CHCN)-phenyl	CH=CHCN	benzyl	CH$_3$
7.	*o,o'*-diCH$_3$O-*p*-(CH=CHCN)-phenyl	CH=CHCN	benzyl	H
8.	*o,o'*-diCH$_3$O-*p*-(CH=CHCN)-phenyl	CH=CHCN	Cl	H
9.	4-cyclopropylnaphth-l-yl	C≡CCH$_3$	allyl	ethyl
10.	4-cyclopropylnaphth-l-yl	CN	allyl	ethyl
11.	4-cyclopropylnaphth-l-yl	CN	benzyl	H
12.	4-cyclopropylnaphth-l-yl	CN	benzyl	H
13.	4-cyclopropylnaphth-l-yl	C≡CCH$_3$	allyl	ethyl
14.	4-cyclopropylnaphth-l-yl	CH=CHCN	allyl	ethyl
15.	4-cyclopropylnaphth-l-yl	CH=CHCN	3-MeO-benzyl	H
16.	4-cyclopropylnaphth-l-yl	CH=CHCN	benzyl	H
17.	*o,o'*-di-CH$_3$O-*p*-CN-phenyl	SO_2NHCH_3	CH=CHCN	CH$_3$
18.	*o,o'*-di-CH$_3$O-*p*-CN-phenyl	CN	CH=CHCN	CH$_3$
19.	*o,o'*-di-CH$_3$O-*p*-CN-phenyl	CN	3-Me-benzyl	H
20.	*o,o'*-di-CH$_3$O-*p*-CN-phenyl	CN	benzyl	H
21.	*o,o'*-di-CH$_3$O-*p*-CN-phenyl	CH=CHCN	CH=CHCN	CH$_3$
22.	*o,o'*-*di*-CH$_3$O-*p*-CN-phenyl	CH=CHCN	CH_2CH_2CN	CH$_3$
23.	*o,o'*-*di*-CH$_3$O-*p*-CN-phenyl	CH=CHCN	CH_2CH_2CN	H
24.	*o,o'*-*di*-CH$_3$O-*p*-CN-phenyl	CH=CHCN	benzyl	H
25.	*o,o'*-*di*-CH$_3$O-*p*-(CH=CHCN)-phenyl	CN	CH$_3$	H
26.	*o,o'*-*di*-CH$_3$O-*p*-(CH=CHCN)-phenyl	CN	CH$_3$	benzyl
27.	*o,o'*-*di*-CH$_3$O-*p*-(CH=CHCN)-phenyl	CN	H	benzyl
28.	*o,o'*-*di*-CH$_3$O-*p*-(CH=CHCN)-phenyl	CN	H	H
29.	*o,o'*-*di*-CH$_3$O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH$_3$	H
30.	*o,o'*-*di*-CH$_3$O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH$_3$	benzyl
31.	*o,o'*-*di*-CH$_3$O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	benzyl
32.	*o,o'*-*di*-CH$_3$O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	H
33.	4-cyclopropylnaphth-l-yl	CN	CH$_3$	H
34.	4-cyclopropylnaphth-l-yl	CN	CH$_3$	benzyl
35.	4-cyclopropylnaphth-l-yl	CN	H	benzyl
36.	4-cyclopropylnaphth-l-yl	CN	H	H

	Ar	V	W	Z
37.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	H
38.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	benzyl
39.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	benzyl
40.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	H
41.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	H
42.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	benzyl
43.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	benzyl
44.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	H
45.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	H
46.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	benzyl
47.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	benzyl
48.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	H
49.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	H
50.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	benzyl
51.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	benzyl
52.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	H
53.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	H
54.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	benzyl
55.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	benzyl
56.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	H
57.	*o,o'-di*-CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	H
58.	*o,o'-di*-CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	benzyl
59.	*o,o'-di*-CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	benzyl
60.	*o,o'-di*-CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	H
61.	4-cyclopropylnaphth-1-yl	CN	F	H
62.	4-cyclopropylnaphth-1-yl	CN	F	benzyl
63.	4-cyclopropylnaphth-1-yl	CH=CHCN	F	H
64.	4-cyclopropylnaphth-1-yl	CH=CHCN	F	benzyl
65.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	H
66.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	benzyl
67.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	H
68.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	benzyl
69.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	F	H
70.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	F	benzyl
71.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	F	H
72.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	F	benzyl
73.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	H
74.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	benzyl
75.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	benzyl
76.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	H
77.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	H
78.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	CH_3	benzyl
79.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	benzyl
80.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	H
81.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	H
82.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	benzyl
83.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	benzyl

	Ar	V	W	Z
84.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	H
85.	4-cyclopropylnaphth-1-yl	F	CH_3	H
86.	4-cyclopropylnaphth-1-yl	F	CH_3	benzyl
87.	4-cyclopropylnaphth-1-yl	F	H	benzyl
88.	4-cyclopropylnaphth-1-yl	F	H	H
89.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	H
90.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	benzyl
91.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	benzyl
92.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	H
93.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	H
94.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	benzyl
95.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	benzyl
96.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	H
97.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	H
98.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	benzyl
99.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	benzyl
100.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	H
101.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	H
102.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	benzyl
103.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	benzyl
104.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	H
105.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	F	H
106.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	F	benzyl
107.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	F	benzyl
108.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	F	H
109.	4-cyclopropylnaphth-1-yl	SO_2NH_2	F	H
110.	4-cyclopropylnaphth-1-yl	SO_2NH_2	F	benzyl
111.	4-cyclopropylnaphth-1-yl	F	F	H
112.	4-cyclopropylnaphth-1-yl	F	F	benzyl
113.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	F	H
114.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	F	benzyl
115.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	F	H
116.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	F	benzyl
117.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	F	H
118.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	F	benzyl
119.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	F	H
120.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	F	benzyl
121.	4-cyclopropyl phenyl	CN	CH_3	H
122.	4-cyclopropyl phenyl	CN	CH_3	benzyl
123.	4-cyclopropyl phenyl	CN	H	benzyl
124.	4-cyclopropyl phenyl	CN	H	H
125.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	H
126.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	benzyl
127.	2,4,6-trimethyl phenyl	CH=CHCN	H	benzyl
128.	2,4,6-trimethyl phenyl	CH=CHCN	H	H
129.	2,4,6-trimethyl phenyl	CN	F	H
130.	2,4,6-trimethyl phenyl	CN	F	benzyl

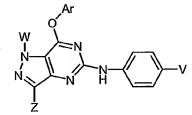
	Ar	V	W	Z
131.	2,4,6-trimethyl phenyl	CH=CHCN	F	H
132.	2,4,6-trimethyl phenyl	CH=CHCN	F	benzyl
133.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	H
134.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	benzyl
135.	2,4,6-trimethyl phenyl	SO_2NH_2	H	benzyl
136.	2,4,6-trimethyl phenyl	SO_2NH_2	H	H
137.	2,4,6-trimethyl phenyl	F	CH_3	H
138.	2,4,6-trimethyl phenyl	F	CH_3	benzyl
139.	2,4,6-trimethyl phenyl	F	H	benzyl
140.	4-cyclopropyl phenyl	F	H	H
141.	4-cyclopropyl phenyl	SO_2NH_2	F	H
142.	4-cyclopropyl phenyl	SO_2NH_2	F	benzyl
143.	4-cyclopropyl phenyl	F	F	H
144.	4-cyclopropyl phenyl	F	F	benzyl
145.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	H
146.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	benzyl
147.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	benzyl
148.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	H
149.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	H
150.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	benzyl
151.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	benzyl
152.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	H
153.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	F	H
154.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	F	benzyl
155.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	F	H
156.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	F	benzyl
157.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	H
158.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	benzyl
159.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	benzyl
160.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	H
161.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	H
162.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	benzyl
163.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	benzyl
164.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	H
165.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	F	H
166.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	F	benzyl
167.	2-methyl-4-cyclopropyl phenyl	F	F	H
168.	2-methyl-4-cyclopropyl phenyl	F	F	benzyl
169.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	CH_3
170.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	cyclopropyl
171.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	cyclopropyl
172.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	CH_3
173.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH_3	CH_3
174.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH_3	cyclopropyl
175.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	cyclopropyl
176.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	CH_3
177.	4-cyclopropylnaphth-1-yl	CN	CH_3	CH_3

	Ar	V	W	Z
178.	4-cyclopropylnaphth-1-yl	CN	CH_3	cyclopropyl
179.	4-cyclopropylnaphth-1-yl	CN	H	cyclopropyl
180.	4-cyclopropylnaphth-1-yl	CN	H	CH_3
181.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	CH_3
182.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	cyclopropyl
183.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	cyclopropyl
184.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	CH_3
185.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	CH_3
186.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	cyclopropyl
187.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	cyclopropyl
188.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	CH_3
189.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
190.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	cyclopropyl
191.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	cyclopropyl
192.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	CH_3
193.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	CH_3
194.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	cyclopropyl
195.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	cyclopropyl
196.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	CH_3
197.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
198.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	cyclopropyl
199.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	cyclopropyl
200.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	CH_3
201.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	CH_3
202.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	cyclopropyl
203.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	cyclopropyl
204.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	CH_3
205.	4-cyclopropylnaphth-1-yl	CN	F	CH_3
206.	4-cyclopropylnaphth-1-yl	CN	F	cyclopropyl
207.	4-cyclopropylnaphth-1-yl	CH=CHCN	F	CH_3
208.	4-cyclopropylnaphth-1-yl	CH=CHCN	F	cyclopropyl
209.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	CH_3
210.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	cyclopropyl
211.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	CH_3
212.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	cyclopropyl
213.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	F	CH_3
214.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	F	cyclopropyl
215.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	F	CH_3
216.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	F	cyclopropyl
217.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	CH_3
218.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	cyclopropyl
219.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	cyclopropyl
220.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	CH_3
221.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	CH_3
222.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	CH_3	cyclopropyl
223.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	cyclopropyl
224.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	CH_3

	Ar	V	W	Z
225.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	CH_3
226.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	cyclopropyl
227.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	cyclopropyl
228.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	CH_3
229.	4-cyclopropylnaphth-1-yl	F	CH_3	CH_3
230.	4-cyclopropylnaphth-1-yl	F	CH_3	cyclopropyl
231.	4-cyclopropylnaphth-1-yl	F	H	cyclopropyl
232.	4-cyclopropylnaphth-1-yl	F	H	CH_3
233.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
234.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	cyclopropyl
235.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	cyclopropyl
236.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	CH_3
237.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	CH_3
238.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	cyclopropyl
239.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	cyclopropyl
240.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	CH_3
241.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
242.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	cyclopropyl
243.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	cyclopropyl
244.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	CH_3
245.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	CH_3
246.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	cyclopropyl
247.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	cyclopropyl
248.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	CH_3
249.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	F	CH_3
250.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	F	cyclopropyl
251.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	F	cyclopropyl
252.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	F	CH_3
253.	4-cyclopropylnaphth-1-yl	SO_2NH_2	F	CH_3
254.	4-cyclopropylnaphth-1-yl	SO_2NH_2	F	cyclopropyl
255.	4-cyclopropylnaphth-1-yl	F	F	CH_3
256.	4-cyclopropylnaphth-1-yl	F	F	cyclopropyl
257.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	F	CH_3
258.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	F	cyclopropyl
259.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	F	CH_3
260.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	F	cyclopropyl
261.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	F	CH_3
262.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	F	cyclopropyl
263.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	F	CH_3
264.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	F	cyclopropyl
265.	4-cyclopropyl phenyl	CN	CH_3	CH_3
266.	2,4,6-trimethyl phenyl	CN	CH_3	cyclopropyl
267.	2,4,6-trimethyl phenyl	CN	H	cyclopropyl
268.	2,4,6-trimethyl phenyl	CN	H	CH_3
269.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	CH_3
270.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	cyclopropyl
271.	2,4,6-trimethyl phenyl	CH=CHCN	H	cyclopropyl

	Ar	V	W	Z
272.	2,4,6-trimethyl phenyl	CH=CHCN	H	CH_3
273.	2,4,6-trimethyl phenyl	CN	F	CH_3
274.	2,4,6-trimethyl phenyl	CN	F	cyclopropyl
275.	2,4,6-trimethyl phenyl	CH=CHCN	F	CH_3
276.	2,4,6-trimethyl phenyl	CH=CHCN	F	cyclopropyl
277.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	CH_3
278.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	cyclopropyl
279.	2,4,6-trimethyl phenyl	SO_2NH_2	H	cyclopropyl
280.	2,4,6-trimethyl phenyl	SO_2NH_2	H	CH_3
281.	2,4,6-trimethyl phenyl	F	CH_3	CH_3
282.	2,4,6-trimethyl phenyl	F	CH_3	cyclopropyl
283.	2,4,6-trimethyl phenyl	F	H	cyclopropyl
284.	2,4,6-trimethyl phenyl	F	H	CH_3
285.	2,4,6-trimethyl phenyl	SO_2NH_2	F	CH_3
286.	4-cyclopropyl phenyl	SO_2NH_2	F	cyclopropyl
287.	4-cyclopropyl phenyl	F	F	CH_3
288.	4-cyclopropyl phenyl	F	F	cyclopropyl
289.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	CH_3
290.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	cyclopropyl
291.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	cyclopropyl
292.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	CH_3
293.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	CH_3
294.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	cyclopropyl
295.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	cyclopropyl
296.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	CH_3
297.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	F	CH_3
298.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	F	cyclopropyl
299.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	F	CH_3
300.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	F	cyclopropyl
301.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	CH_3
302.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	cyclopropyl
303.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	cyclopropyl
304.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	CH_3
305.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	CH_3
306.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	cyclopropyl
307.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	cyclopropyl
308.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	CH_3
309.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	F	CH_3
310.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	F	cyclopropyl
311.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	F	CH_3
312.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	F	cyclopropyl
313.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	H	H
314.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	CH_3	H
315.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	H	Cl
316.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	CH_3	Cl

Table 3 Contemplated Compounds of Formula IA-3



	Ar	V	W	Z
1.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	benzyl	F
2.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	benzyl	Cl
3.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	allyl	F
4.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	allyl	Cl
5.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	benzyl	CH_3
6.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	3-MeO-benzyl	CH_3
7.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	3-Me-benzyl	CH_3
8.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	allyl	CH_3
9.	4-cyclopropylnaphth-1-yl	CN	CH_2CH_3	H
10.	4-cyclopropylnaphth-1-yl	CN	isopropyl	H
11.	4-cyclopropylnaphth-1-yl	CN	CH_2CF_3	Br
12.	4-cyclopropylnaphth-1-yl	CN	CH_2CF_3	Cl
13.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_2CH_3	H
14.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_2CH_3	Br
15.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_2CF_3	CH_3
16.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_2CF_3	H
17.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	benzyl	F
18.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	benzyl	Cl
19.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	allyl	F
20.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	allyl	Cl
21.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	CH_3
22.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	Br
23.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	allyl	CH_3
24.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	allyl	H
25.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	F
26.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	benzyl	Cl
27.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	benzyl	H
28.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	H
29.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	CH_3
30.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	benzyl	CH_3
31.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	benzyl	H
32.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	H
33.	4-cyclopropylnaphth-1-yl	CN	H	CH_3
34.	4-cyclopropylnaphth-1-yl	CN	benzyl	CH_3
35.	4-cyclopropylnaphth-1-yl	CN	benzyl	H

	Ar	V	W	Z
36.	4-cyclopropylnaphth-1-yl	CN	H	H
37.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	CH_3
38.	4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	CH_3
39.	4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	H
40.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	H
41.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	CH_3
42.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	benzyl	CH_3
43.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	benzyl	H
44.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	H
45.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	CH_3
46.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	CH_3
47.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	H
48.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	H
49.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	CH_3
50.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	benzyl	CH_3
51.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	benzyl	H
52.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	H
53.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	CH_3
54.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	CH_3
55.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	H
56.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	H
57.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	F
58.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	benzyl	F
59.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	benzyl	F
60.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	F
61.	4-cyclopropylnaphth-1-yl	CN	H	F
62.	4-cyclopropylnaphth-1-yl	CN	benzyl	F
63.	4-cyclopropylnaphth-1-yl	CH=CHCN	H	F
64.	4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	F
65.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	F
66.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	benzyl	F
67.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	F
68.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	F
69.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	F
70.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	benzyl	F
71.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	F
72.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	F
73.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	CH_3
74.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	benzyl	CH_3
75.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	benzyl	H
76.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	H
77.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	CH_3
78.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	benzyl	CH_3
79.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	benzyl	H
80.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	H
81.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	CH_3
82.	4-cyclopropylnaphth-1-yl	SO_2NH_2	benzyl	CH_3

	Ar	V	W	Z
83.	4-cyclopropylnaphth-1-yl	SO_2NH_2	benzyl	H
84.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	H
85.	4-cyclopropylnaphth-1-yl	F	H	CH_3
86.	4-cyclopropylnaphth-1-yl	F	benzyl	CH_3
87.	4-cyclopropylnaphth-1-yl	F	benzyl	H
88.	4-cyclopropylnaphth-1-yl	F	H	H
89.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	CH_3
90.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	CH_3
91.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	H
92.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	H
93.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	CH_3
94.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	benzyl	CH_3
95.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	benzyl	H
96.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	H
97.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	CH_3
98.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	CH_3
99.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	H
100.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	H
101.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	CH_3
102.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	benzyl	CH_3
103.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	benzyl	H
104.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	H
105.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	F
106.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	benzyl	F
107.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	benzyl	F
108.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	F
109.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	F
110.	4-cyclopropylnaphth-1-yl	SO_2NH_2	benzyl	F
111.	4-cyclopropylnaphth-1-yl	F	H	F
112.	4-cyclopropylnaphth-1-yl	F	benzyl	F
113.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	F
114.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	F
115.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	F
116.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	benzyl	F
117.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	F
118.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	F
119.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	F
120.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	benzyl	F
121.	2,4,6-trimethyl phenyl	CN	H	CH_3
122.	2,4,6-trimethyl phenyl	CN	benzyl	CH_3
123.	2,4,6-trimethyl phenyl	CN	benzyl	H
124.	2,4,6-trimethyl phenyl	CN	H	H
125.	2,4,6-trimethyl phenyl	CH=CHCN	H	CH_3
126.	2,4,6-trimethyl phenyl	CH=CHCN	benzyl	CH_3
127.	4-cyclopropyl phenyl	CH=CHCN	benzyl	H
128.	4-cyclopropyl phenyl	CH=CHCN	H	H
129.	4-cyclopropyl phenyl	CN	H	F

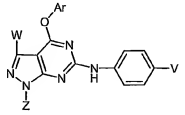
	Ar	V	W	Z
130.	4-cyclopropyl phenyl	CN	benzyl	F
131.	4-cyclopropyl phenyl	CH=CHCN	H	F
132.	2,4,6-trimethyl phenyl	CH=CHCN	benzyl	F
133.	2,4,6-trimethyl phenyl	SO_2NH_2	H	CH_3
134.	2,4,6-trimethyl phenyl	SO_2NH_2	benzyl	CH_3
135.	2,4,6-trimethyl phenyl	SO_2NH_2	benzyl	H
136.	2,4,6-trimethyl phenyl	SO_2NH_2	H	H
137.	2,4,6-trimethyl phenyl	F	H	CH_3
138.	2,4,6-trimethyl phenyl	F	benzyl	CH_3
139.	2,4,6-trimethyl phenyl	F	benzyl	H
140.	2,4,6-trimethyl phenyl	F	H	H
141.	2,4,6-trimethyl phenyl	SO_2NH_2	H	F
142.	2,4,6-trimethyl phenyl	SO_2NH_2	benzyl	F
143.	2,4,6-trimethyl phenyl	F	H	F
144.	2,4,6-trimethyl phenyl	F	benzyl	F
145.	2,4,6-trimethyl phenyl	CN	H	CH_3
146.	2,4,6-trimethyl phenyl	CN	benzyl	CH_3
147.	2,4,6-trimethyl phenyl	CN	benzyl	H
148.	2,4,6-trimethyl phenyl	CN	H	H
149.	2,4,6-trimethyl phenyl	CH=CHCN	H	CH_3
150.	2,4,6-trimethyl phenyl	CH=CHCN	benzyl	CH_3
151.	2,4,6-trimethyl phenyl	CH=CHCN	benzyl	H
152.	2,4,6-trimethyl phenyl	CH=CHCN	H	H
153.	2,4,6-trimethyl phenyl	CN	H	F
154.	2,4,6-trimethyl phenyl	CN	benzyl	F
155.	2,4,6-trimethyl phenyl	CH=CHCN	H	F
156.	2,4,6-trimethyl phenyl	CH=CHCN	benzyl	F
157.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	CH_3
158.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	CH_3
159.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	H
160.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	H
161.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	CH_3
162.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	CH_3
163.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	H
164.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	H
165.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	F
166.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	F
167.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	F
168.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	F
169.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	CH_3
170.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	cyclopropyl	CH_3
171.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	cyclopropyl	H
172.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	H
173.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH_3	CH_3
174.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	cyclopropyl	CH_3
175.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	cyclopropyl	H
176.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH_3	H

	Ar	V	W	Z
177.	4-cyclopropylnaphth-1-yl	CN	CH_3	CH_3
178.	4-cyclopropylnaphth-1-yl	CN	cyclopropyl	CH_3
179.	4-cyclopropylnaphth-1-yl	CN	cyclopropyl	H
180.	4-cyclopropylnaphth-1-yl	CN	CH_3	H
181.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	CH_3
182.	4-cyclopropylnaphth-1-yl	CH=CHCN	cyclopropyl	CH_3
183.	4-cyclopropylnaphth-1-yl	CH=CHCN	cyclopropyl	H
184.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	H
185.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	CH_3
186.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	CH_3
187.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	H
188.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	H
189.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
190.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	CH_3
191.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	H
192.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	H
193.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	CH_3
194.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	cyclopropyl	CH_3
195.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	cyclopropyl	H
196.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	H
197.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
198.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	CH_3
199.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	H
200.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	H
201.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	F
202.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	cyclopropyl	F
203.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	cyclopropyl	F
204.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH_3	F
205.	4-cyclopropylnaphth-1-yl	CN	CH_3	F
206.	4-cyclopropylnaphth-1-yl	CN	cyclopropyl	F
207.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	F
208.	4-cyclopropylnaphth-1-yl	CH=CHCN	cyclopropyl	F
209.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	F
210.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	F
211.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	F
212.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	F
213.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	F
214.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	cyclopropyl	F
215.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	F
216.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	F
217.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	CH_3
218.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	cyclopropyl	CH_3
219.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	cyclopropyl	H
220.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	H
221.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	CH_3
222.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	cyclopropyl	CH_3
223.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	cyclopropyl	H

	Ar	V	W	Z
224.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	CH_3	H
225.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	CH_3
226.	4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	CH_3
227.	4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	H
228.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	H
229.	4-cyclopropylnaphth-1-yl	F	CH_3	CH_3
230.	4-cyclopropylnaphth-1-yl	F	cyclopropyl	CH_3
231.	4-cyclopropylnaphth-1-yl	F	cyclopropyl	H
232.	4-cyclopropylnaphth-1-yl	F	CH_3	H
233.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
234.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	CH_3
235.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	H
236.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	H
237.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	CH_3
238.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	cyclopropyl	CH_3
239.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	cyclopropyl	H
240.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	H
241.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
242.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	CH_3
243.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	H
244.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	H
245.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	CH_3
246.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	cyclopropyl	CH_3
247.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	cyclopropyl	H
248.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	H
249.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	F
250.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	cyclopropyl	F
251.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	cyclopropyl	F
252.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	CH_3	F
253.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	F
254.	4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	F
255.	4-cyclopropylnaphth-1-yl	F	CH_3	F
256.	4-cyclopropylnaphth-1-yl	F	cyclopropyl	F
257.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	F
258.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	F
259.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	F
260.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	cyclopropyl	F
261.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	F
262.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	F
263.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	F
264.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	cyclopropyl	F
265.	4-cyclopropyl phenyl	CN	CH_3	CH_3
266.	4-cyclopropyl phenyl	CN	cyclopropyl	CH_3
267.	2,4,6-trimethyl phenyl	CN	cyclopropyl	H
268.	2,4,6-trimethyl phenyl	CN	CH_3	H
269.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	CH_3
270.	2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	CH_3

	Ar	V	W	Z
271.	2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	H
272.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	H
273.	2,4,6-trimethyl phenyl	CN	CH_3	F
274.	2,4,6-trimethyl phenyl	CN	cyclopropyl	F
275.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	F
276.	2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	F
277.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	CH_3
278.	2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	CH_3
279.	2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	H
280.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	H
281.	2,4,6-trimethyl phenyl	F	CH_3	CH_3
282.	2,4,6-trimethyl phenyl	F	cyclopropyl	CH_3
283.	2,4,6-trimethyl phenyl	F	cyclopropyl	H
284.	2,4,6-trimethyl phenyl	F	CH_3	H
285.	4-cyclopropyl phenyl	SO_2NH_2	CH_3	F
286.	4-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	F
287.	4-cyclopropyl phenyl	F	CH_3	F
288.	4-cyclopropyl phenyl	F	cyclopropyl	F
289.	2,4,6-trimethyl phenyl	CN	CH_3	CH_3
290.	2,4,6-trimethyl phenyl	CN	cyclopropyl	CH_3
291.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	cyclopropyl	H
292.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	H
293.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	CH_3
294.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	CH_3
295.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	H
296.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	H
297.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	F
298.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	cyclopropyl	F
299.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	F
300.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	F
301.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	CH_3
302.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	CH_3
303.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	H
304.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	H
305.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	CH_3
306.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	cyclopropyl	CH_3
307.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	cyclopropyl	H
308.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	H
309.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	F
310.	2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	F
311.	2,4,6-trimethyl phenyl	F	CH_3	F
312.	2,4,6-trimethyl phenyl	F	cyclopropyl	F
313.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	H	H
314.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	CH_3	H
315.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	H	Cl
316.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	CH_3	Cl

Table 4 Contemplated Compounds of Formula IA-4



	Ar	V	W	Z
1.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	H
2.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	H
3.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	CH_3
4.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	Cl	CH_3
5.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	H
6.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	Cl	H
7.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	Br	CH_3
8.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	CH_3
9.	4-cyclopropylnaphth-1-yl	CN	H	H
10.	4-cyclopropylnaphth-1-yl	CN	CH_3	H
11.	4-cyclopropylnaphth-1-yl	CN	F	CH_3
12.	4-cyclopropylnaphth-1-yl	CN	Cl	CH_3
13.	4-cyclopropylnaphth-1-yl	CH=CHCN	Cl	H
14.	4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	H
15.	4-cyclopropylnaphth-1-yl	CH=CHCN	F	CH_3
16.	4-cyclopropylnaphth-1-yl	CH=CHCN	Cl	CH_3
17.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	Br	H
18.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	H
19.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	CH_3
20.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	CH_3
21.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	H
22.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	H
23.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	CH_3
24.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	Cl	CH_3
25.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	CH_3
26.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	Cl	CH_3
27.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	Cl	H
28.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	H
29.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	CH_3
30.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH_3	CH_3
31.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	H
32.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	Cl	H
33.	4-cyclopropylnaphth-1-yl	CN	H	ethyl
34.	4-cyclopropylnaphth-1-yl	CN	Cl	ethyl
35.	4-cyclopropylnaphth-1-yl	CN	F	H
36.	4-cyclopropylnaphth-1-yl	CN	Cl	H

	Ar	V	W	Z
37.	4-cyclopropylnaphth-l-yl	CH=CHCN	Br	ethyl
38.	4-cyclopropylnaphth-l-yl	CH=CHCN	H	ethyl
39.	4-cyclopropylnaphth-l-yl	CH=CHCN	H	H
40.	4-cyclopropylnaphth-l-yl	CH=CHCN	CH_3	H
41.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	CH_3
42.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	Cl	CH_3
43.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	Cl	H
44.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	H
45.	*o,o'-di*-CH_3O-*p*-CN-phenyl	C≡CCH$_3$	Cl	CH_3
46.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	Br	CH_3
47.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	Br	H
48.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	H
49.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	H
50.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	benzyl
51.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	benzyl
52.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	H
53.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	H
54.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH_3	benzyl
55.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	benzyl
56.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	H
57.	4-cyclopropylnaphth-l-yl	CN	CH_3	H
58.	4-cyclopropylnaphth-l-yl	CN	CH_3	benzyl
59.	4-cyclopropylnaphth-l-yl	CN	H	benzyl
60.	4-cyclopropylnaphth-l-yl	CN	H	H
61.	4-cyclopropylnaphth-l-yl	CH=CHCN	CH_3	H
62.	4-cyclopropylnaphth-l-yl	CH=CHCN	CH_3	benzyl
63.	4-cyclopropylnaphth-l-yl	CH=CHCN	H	benzyl
64.	4-cyclopropylnaphth-l-yl	CH=CHCN	H	H
65.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	H
66.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	benzyl
67.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	benzyl
68.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	H
69.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	H
70.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	benzyl
71.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	benzyl
72.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	H
73.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	H
74.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	benzyl
75.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	benzyl
76.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	H
77.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	H
78.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	benzyl
79.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	benzyl
80.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	H
81.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	H
82.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	benzyl
83.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	benzyl

	Ar	V	W	Z
84.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	H
85.	4-cyclopropylnaphth-1-yl	CN	F	H
86.	4-cyclopropylnaphth-1-yl	CN	F	benzyl
87.	4-cyclopropylnaphth-1-yl	CH=CHCN	F	H
88.	4-cyclopropylnaphth-1-yl	CH=CHCN	F	benzyl
89.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	H
90.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	benzyl
91.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	H
92.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	benzyl
93.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	F	H
94.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	F	benzyl
95.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	F	H
96.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	F	benzyl
97.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	H
98.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	benzyl
99.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	benzyl
100.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	H
101.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	H
102.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	CH_3	benzyl
103.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	benzyl
104.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	H
105.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	H
106.	4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	benzyl
107.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	benzyl
108.	4-cyclopropylnaphth-1-yl	SO_2NH_2	H	H
109.	4-cyclopropylnaphth-1-yl	F	CH_3	H
110.	4-cyclopropylnaphth-1-yl	F	CH_3	benzyl
111.	4-cyclopropylnaphth-1-yl	F	H	benzyl
112.	4-cyclopropylnaphth-1-yl	F	H	H
113.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	H
114.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	benzyl
115.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	benzyl
116.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	H
117.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	H
118.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	benzyl
119.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	benzyl
120.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	H
121.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	H
122.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	benzyl
123.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	benzyl
124.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	H
125.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	H
126.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	benzyl
127.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	benzyl
128.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	H
129.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	F	H
130.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	F	benzyl

	Ar	V	W	Z
131.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	F	benzyl
132.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	F	H
133.	4-cyclopropylnaphth-l-yl	SO_2NH_2	F	H
134.	4-cyclopropylnaphth-l-yl	SO_2NH_2	F	benzyl
135.	4-cyclopropylnaphth-l-yl	F	F	H
136.	4-cyclopropylnaphth-l-yl	F	F	benzyl
137.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	F	H
138.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	F	benzyl
139.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	F	H
140.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	F	benzyl
141.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	F	H
142.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	F	benzyl
143.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	F	H
144.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	F	benzyl
145.	4-cyclopropyl phenyl	CN	CH_3	H
146.	4-cyclopropyl phenyl	CN	CH_3	benzyl
147.	4-cyclopropyl phenyl	CN	H	benzyl
148.	2,4,6-trimethyl phenyl	CN	H	H
149.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	H
150.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	benzyl
151.	2,4,6-trimethyl phenyl	CH=CHCN	H	benzyl
152.	2,4,6-trimethyl phenyl	CH=CHCN	H	H
153.	2,4,6-trimethyl phenyl	CN	F	H
154.	2,4,6-trimethyl phenyl	CN	F	benzyl
155.	2,4,6-trimethyl phenyl	CH=CHCN	F	H
156.	2,4,6-trimethyl phenyl	CH=CHCN	F	benzyl
157.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	H
158.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	benzyl
159.	2,4,6-trimethyl phenyl	SO_2NH_2	H	benzyl
160.	2,4,6-trimethyl phenyl	SO_2NH_2	H	H
161.	2,4,6-trimethyl phenyl	F	CH_3	H
162.	2,4,6-trimethyl phenyl	F	CH_3	benzyl
163.	2,4,6-trimethyl phenyl	F	H	benzyl
164.	2,4,6-trimethyl phenyl	F	H	H
165.	2,4,6-trimethyl phenyl	SO_2NH_2	F	H
166.	2,4,6-trimethyl phenyl	SO_2NH_2	F	benzyl
167.	4-cyclopropyl phenyl	F	F	H
168.	4-cyclopropyl phenyl	F	F	benzyl
169.	2,4,6-trimethyl phenyl	CN	CH_3	H
170.	2,4,6-trimethyl phenyl	CN	CH_3	benzyl
171.	2,4,6-trimethyl phenyl	CN	H	benzyl
172.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	H
173.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	H
174.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	benzyl
175.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	benzyl
176.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	H
177.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	F	H

	Ar	V	W	Z
178.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	F	benzyl
179.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	F	H
180.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	F	benzyl
181.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	H
182.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	benzyl
183.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	benzyl
184.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	H
185.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	H
186.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	benzyl
187.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	benzyl
188.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	H
189.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	F	H
190.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	F	benzyl
191.	2,4,6-trimethyl phenyl	F	F	H
192.	2,4,6-trimethyl phenyl	F	F	benzyl
193.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	CH_3
194.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	cyclopropyl
195.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	cyclopropyl
196.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	H	CH_3
197.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	CH_3	CH_3
198.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	CH_3	cyclopropyl
199.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	cyclopropyl
200.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	H	CH_3
201.	4-cyclopropylnaphth-l-yl	CN	CH_3	CH_3
202.	4-cyclopropylnaphth-l-yl	CN	CH_3	cyclopropyl
203.	4-cyclopropylnaphth-l-yl	CN	H	cyclopropyl
204.	4-cyclopropylnaphth-l-yl	CN	H	CH_3
205.	4-cyclopropylnaphth-l-yl	CH=CHCN	CH_3	CH_3
206.	4-cyclopropylnaphth-l-yl	CH=CHCN	CH_3	cyclopropyl
207.	4-cyclopropylnaphth-l-yl	CH=CHCN	H	cyclopropyl
208.	4-cyclopropylnaphth-l-yl	CH=CHCN	H	CH_3
209.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	CH_3
210.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	CH_3	cyclopropyl
211.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	cyclopropyl
212.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	H	CH_3
213.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
214.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	cyclopropyl
215.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	cyclopropyl
216.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	H	CH_3
217.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	CH_3
218.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	CH_3	cyclopropyl
219.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	cyclopropyl
220.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	H	CH_3
221.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
222.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	cyclopropyl
223.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	cyclopropyl
224.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	H	CH_3

	Ar	V	W	Z
225.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	CH_3
226.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CN	F	cyclopropyl
227.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	cyclopropyl
228.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	CH=CHCN	F	CH_3
229.	4-cyclopropylnaphth-l-yl	CN	F	CH_3
230.	4-cyclopropylnaphth-l-yl	CN	F	cyclopropyl
231.	4-cyclopropylnaphth-l-yl	CH=CHCN	F	CH_3
232.	4-cyclopropylnaphth-l-yl	CH=CHCN	F	cyclopropyl
233.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	CH_3
234.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CN	F	cyclopropyl
235.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	CH_3
236.	*o,o'-di*-CH_3O-*p*-CN-phenyl	CH=CHCN	F	cyclopropyl
237.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	F	CH_3
238.	*o,o'-di*-CH_3-*p*-CN-phenyl	CN	F	cyclopropyl
239.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	F	CH_3
240.	*o,o'-di*-CH_3-*p*-CN-phenyl	CH=CHCN	F	cyclopropyl
241.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	CH_3
242.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	cyclopropyl
243.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	cyclopropyl
244.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	H	CH_3
245.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	CH_3	CH_3
246.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	CH_3	cyclopropyl
247.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	cyclopropyl
248.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	H	CH_3
249.	4-cyclopropylnaphth-l-yl	SO_2NH_2	CH_3	CH_3
250.	4-cyclopropylnaphth-l-yl	SO_2NH_2	CH_3	cyclopropyl
251.	4-cyclopropylnaphth-l-yl	SO_2NH_2	H	cyclopropyl
252.	4-cyclopropylnaphth-l-yl	SO_2NH_2	H	CH_3
253.	4-cyclopropylnaphth-l-yl	F	CH_3	CH_3
254.	4-cyclopropylnaphth-l-yl	F	CH_3	cyclopropyl
255.	4-cyclopropylnaphth-l-yl	F	H	cyclopropyl
256.	4-cyclopropylnaphth-l-yl	F	H	CH_3
257.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
258.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	cyclopropyl
259.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	cyclopropyl
260.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	CH_3
261.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	CH_3
262.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	CH_3	cyclopropyl
263.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	cyclopropyl
264.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	H	CH_3
265.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
266.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	cyclopropyl
267.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	cyclopropyl
268.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	H	CH_3
269.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	CH_3
270.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	CH_3	cyclopropyl
271.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	cyclopropyl

	Ar	V	W	Z
272.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	H	CH_3
273.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	F	CH_3
274.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	SO_2NH_2	F	cyclopropyl
275.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	F	cyclopropyl
276.	*o,o'-di*CH_3O-*p*-(CH=CHCN)-phenyl	F	F	CH_3
277.	4-cyclopropylnaphth-l-yl	SO_2NH_2	F	CH_3
278.	4-cyclopropylnaphth-l-yl	SO_2NH_2	F	cyclopropyl
279.	4-cyclopropylnaphth-l-yl	F	F	CH_3
280.	4-cyclopropylnaphth-l-yl	F	F	cyclopropyl
281.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	F	CH_3
282.	*o,o'-di*-CH_3O-*p*-CN-phenyl	SO_2NH_2	F	cyclopropyl
283.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	F	CH_3
284.	*o,o'-di*-CH_3O-*p*-CN-phenyl	F	F	cyclopropyl
285.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	F	CH_3
286.	*o,o'-di*-CH_3-*p*-CN-phenyl	SO_2NH_2	F	cyclopropyl
287.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	F	CH_3
288.	*o,o'-di*-CH_3-*p*-CN-phenyl	F	F	cyclopropyl
289.	2,4,6-trimethyl phenyl	CN	CH_3	CH_3
290.	2,4,6-trimethyl phenyl	CN	CH_3	cyclopropyl
291.	2,4,6-trimethyl phenyl	CN	H	cyclopropyl
292.	2,4,6-trimethyl phenyl	CN	H	CH_3
293.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	CH_3
294.	2,4,6-trimethyl phenyl	CH=CHCN	CH_3	cyclopropyl
295.	2,4,6-trimethyl phenyl	CH=CHCN	H	cyclopropyl
296.	2,4,6-trimethyl phenyl	CH=CHCN	H	CH_3
297.	2,4,6-trimethyl phenyl	CN	F	CH_3
298.	2,4,6-trimethyl phenyl	CN	F	cyclopropyl
299.	2,4,6-trimethyl phenyl	CH=CHCN	F	CH_3
300.	2,4,6-trimethyl phenyl	CH=CHCN	F	cyclopropyl
301.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	CH_3
302.	2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	cyclopropyl
303.	2,4,6-trimethyl phenyl	SO_2NH_2	H	cyclopropyl
304.	2,4,6-trimethyl phenyl	SO_2NH_2	H	CH_3
305.	2,4,6-trimethyl phenyl	F	CH_3	CH_3
306.	2,4,6-trimethyl phenyl	F	CH_3	cyclopropyl
307.	2,4,6-trimethyl phenyl	F	H	cyclopropyl
308.	2,4,6-trimethyl phenyl	F	H	CH_3
309.	4-cyclopropyl phenyl	SO_2NH_2	F	CH_3
310.	4-cyclopropyl phenyl	SO_2NH_2	F	cyclopropyl
311.	4-cyclopropyl phenyl	F	F	CH_3
312.	4-cyclopropyl phenyl	F	F	cyclopropyl
313.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	CH_3
314.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	cyclopropyl
315.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	cyclopropyl
316.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	H	CH_3
317.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	CH_3
318.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	cyclopropyl

	Ar	V	W	Z
319.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	cyclopropyl
320.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	CH_3
321.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	F	CH_3
322.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CN	F	cyclopropyl
323.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	F	CH_3
324.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	F	cyclopropyl
325.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	CH_3
326.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	cyclopropyl
327.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	cyclopropyl
328.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	CH_3
329.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	CH_3
330.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	cyclopropyl
331.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	cyclopropyl
332.	*o,o'*-dimethyl-*p*-cyclopropyl phenyl	F	H	CH_3
333.	2,4,6-trimethyl phenyl	SO_2NH_2	F	CH_3
334.	2,4,6-trimethyl phenyl	SO_2NH_2	F	cyclopropyl
335.	2,4,6-trimethyl phenyl	F	F	CH_3
336.	2,4,6-trimethyl phenyl	F	F	cyclopropyl
337.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	H	H
338.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	CH_3	H
339.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	H	Cl
340.	*o,o'-di*-CH_3-*p*-acetyl-phenyl	CN	CH_3	Cl

Additional contemplated and prophetic examples, which are not exhaustive but merely representative of this invention, are shown below:

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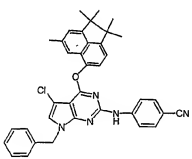
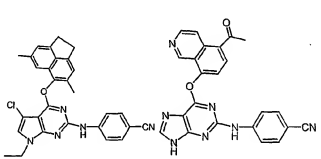
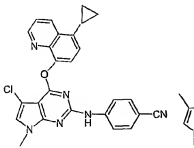
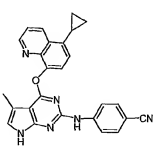
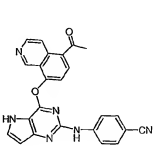
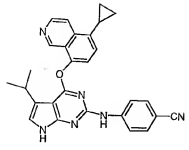
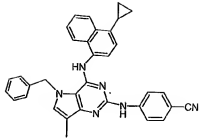
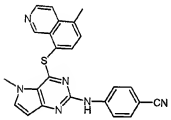
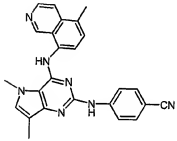
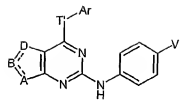






Claims

What is claimed is

1. A compound of formula



IA

where the dashed line represents a double bond between either A and B or B and D, where T' is O or S; A is –N= , NZ or =CZ;

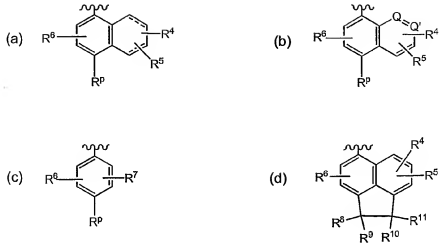
B is =CH or =N-; D is =CW or =N-, or NW, provided that at least one of A and D is –N= or NZ or NW, and further provided that when both A and D are nitrogen, then B is CH;

Z is H, F, Cl, Br, CH_3, CH_2CH_3, cyclopropyl, or benzyl, in which the phenyl moiety of the benzyl group is optionally substituted with methyl or methoxy, provided that Z is not F or Cl when A is NZ;

Z is H, F, Cl, Br, CH_3, CH_2CH_3, cyclopropyl, or benzyl, the phenyl moiety of said benzyl optionally substituted with one or two groups selected independently from methyl and methoxy, provided that when A is NZ, Z is neither F nor Cl; W is H, F, Cl, Br, methyl, ethyl, cyclopropyl, allyl, CH_2CF_3, cyanomethyl, CH_2CH_2CN, CH=CHCN, or benzyl, the phenyl moiety of said benzyl optionally substituted with one or two groups selected independently from methyl and methoxy, provided that when D is NW, W is neither F or Cl;

V is F, Cl, CN, SO_2CH_3, SO_2NH_2, SO_2NHCH_3, C≡CCH_3, or CH=CHCN;

and Ar is one of (a), (b), (c), and (d) below



where the dashed lines in (a) represent optional double bonds; where R^p is Cl, Br, I, CN, methyl, ethyl, n-propyl, isopropyl, cyclopropylmethyl, C_3.C_6 cycloalkyl, CH=CHCN, acetyl, or NH-C_1-C_6 alkyl, said alkyl and cycloalkyl groups optionally substituted with methyl, methoxy, halogen, or cyano; R^4, R^5, and R^6 are, independently, H, F, Cl, Br, CH_3, CH_2F, CHF_2, CF_3, isopropyl, cyclopropyl, OCH_3, OH, OCF_3, NH_2 and $NHCH_3$, or R^6 and R^p on adjacent ring atoms, together with the ring atoms to which they are attached, form an additional fused five-membered ring; Q and Q' are, independently, N or CH; R^7 is Cl, Br, I, CH_3, CF_3, OCH_3, isopropyl, cyclopropyl, *t*-butyl, or cyclobutyl; and R^8 – R^{11} are, independently, H or CH_3,

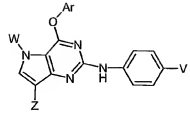
with the proviso that when Ar is (c), and the A,B,D ring is imidazolo, R^p and V are not both one of CH_3, CN, and CH=CHCN.

2. The compound of claim 1, wherein Ar is (a) or (c).

3. The compound of claim 2, where R^6 either is H or is in the 2-position

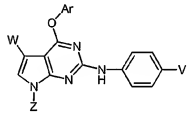
4. The compound of claim 3, wherein Ar is selected from 4-cyclopropyl phenyl; 4-cyclopropylmethyl phenyl; 4-bromophenyl; 2-chloro-4-bromophenyl; 4-bromo-1-naphthyl; 4-cyclopropyl-1-naphthyl; 2,6-dimethyl-4-cyanophenyl; 2,6-dimethoxy-4-cyanophenyl; 2,6-dimethyl-4-(2-cyanoethenyl) phenyl; 2,6-dimethoxy-4-(2-cyanoethenyl) phenyl; 2-methyl-4-cyclopropyl phenyl; 2,6-dimethyl-4-cyclopropyl phenyl; 2,6-di-trifluoromethyl-4-cyclopropyl phenyl; 2,4,6-trimethyl phenyl; and 2,6-dimethyl-4-acetyl phenyl.

5. The compound of claim 1, which is a compound of formula IA-1



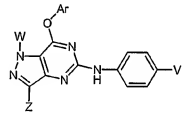
IA-1

6. The compound of claim 1, which is a compound of formula IA-2

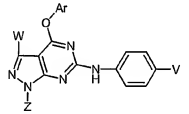


IA-2

7. The compound of claim 1, which is a compound of formula IA-3



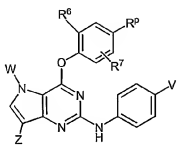
8. The compound of claim 1, which is a compound of formula IA-4



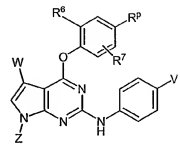
9. The compound of any of claims 5-8, where Ar is 4-cyclopropyl-, 4-acetyl-, 4-methyl-, 4-bromo-, or 4-cyano-2,6-di-substituted phenyl.

10. The compound of claim 9, where V is CN, and where W and Z are, independently, H, methyl, halo, or benzyl.

11. The compound of claim 3 which is a compound selected from the two structures below



and



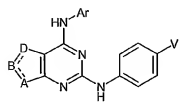
IA-1a IA-2a

12. The compound of claim 11, where V is CN or CH=CHCN, R^6 is 2-methyl, 2-methoxy, or 2-chloro and R^7 is H, 6-methyl, or 6-methoxy.

13. The compound of claim 12, where R^p is CN, cyclopropyl, methyl, Br, Cl, CH=CHCN, or acetyl.

14. The compound of claim 13 which is selected from the group consisting of
1) a compound of structure IA-1a, where V is CN, W is H, methyl, ethyl, or benzyl, and Z is H, chloro, bromo, methyl, or ethyl; and
2) a compound of structure IA-2a, where V is CN, W is H, chloro, bromo, methyl, or ethyl and Z is H, methyl, ethyl, or benzyl.

15. A compound of formula IB



IB

where the dashed line represents a double bond between either A and B or B and D, and where A is –N= , NZ, or CZ;

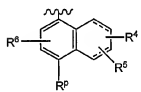
B is CH or =N-

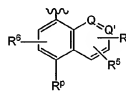
D is CW or =N-, or NW, provided that at least one of A and D is –N= or NZ or NW, and further provided that when both A and D are nitrogen, then B is CH;

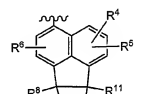
Z is H, F, Cl, Br, CH_3, CH_2CH_3, cyclopropyl, or benzyl, the phenyl moiety of said benzyl optionally substituted with methyl or methoxy, provided that when A is NZ, Z is neither F nor Cl; W is H, F, Cl, Br, methyl, ethyl, cyclopropyl, allyl, CH_2CF_3, cyanomethyl, CH_2CH_2CN, CH=CHCN, or benzyl, the phenyl moiety of said benzyl optionally substituted with methyl or methoxy, provided that when D is NW, W is neither F or Cl;

V is F, Cl, CN, SO_2CH_3, SO_2NH_2, SO_2NHCH_3, C≡CCH_3, or CH=CHCN,

and Ar is one of (a), (b), and (d) below:

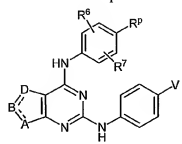

(a)


(b)


(d)

where R^p is Cl, Br, I, CN, methyl, ethyl, n-propyl, isopropyl, cyclopropylmethyl, C_3-C_6 cycloalkyl, CH=CHCN, acetyl, or NH-C_1-C_6 alkyl, said alkyl and cycloalkyl groups optionally substituted with methyl, methoxy, halogen, or cyano; R^4, R^5, and R^6 are, independently, H, F, Cl, Br, CH_3, CH_2F, CHF_2, CF_3, isopropyl, cyclopropyl, OCH_3, OH, OCF_3, NH_2 and $NHCH_3$; Q and Q' are, independently, N or CH; R^7 is Cl, Br, I, CH_3, CF_3, OCH_3, isopropyl, cyclopropyl, *t*-butyl, or cyclobutyl; and R^8 – R^{11} are, independently, H or CH_3.

16. The compound of claim 14 which is a compound of formula IB-1



IB-1

where the dashed line represents a double bond between either A and B or B and D;

where A is –N=, NZ or CZ;

B is CH or =N-

D is CW or =N-, or NW;

Z is H, F, Cl, Br, CH_3, CH_2CH_3, cyclopropyl, or benzyl, the phenyl moiety of said benzyl optionally substituted with methyl or methoxy, provided that when A is NZ, Z is neither F nor Cl;

W is H, F, Cl, Br, methyl, ethyl, cyclopropyl, allyl, CH_2CF_3, CH_2CN, CH_2CH_2CN, CH=CHCN, or benzyl, the phenyl moiety of said benzyl optionally substituted with methyl or methoxy, provided that when D is NW, W is neither F nor Cl;

V is F, Cl, CN, SO_2CH_3, SO_2NH_2, SO_2NHCH_3, C≡CCH$_3$, or CH=CHCN;

provided that at least one of A and D is –N= or NZ or NW, and further provided that when both A and D are nitrogen, then B is CH and V is other than CN or CH=CHCN;

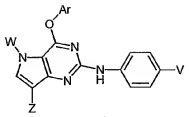
wherein R^P is Cl, Br, I, CN, CH=CHCN, methyl, ethyl, n-propyl, isopropyl, cyclopropylmethyl, C_3-C_6 cycloalkyl, acetyl, and NH-C_3-C_6 alkyl; R^6 is H, F, Cl, Br, CH_3, CH_2F, CHF_2, CF_3, isopropyl, cyclopropyl, OCH_3, OH, OCF_3, NH_2 and $NHCH_3$; R^7 is Cl, Br, I, CH_3, CF_3, OCH_3, isopropyl, cyclopropyl, *t*-butyl, or cyclobutyl.

17. The compound of claim 16, where V is CN or CH=CHCN, R^6 is 2-methyl, 2-methoxy, or 2-chloro and R^7 is H, 6-methyl, or 6-methoxy.

18. The compound of claim 17, where R^P is CN, cyclopropyl, methyl, Br, Cl, CH=CHCN, or acetyl.

19. The compound of claim1, where one of A and D is =N- and the other is NZ or NW.

20. The compound of claim 5 which is a compound of formula IA-1 selected from compounds in Table 1:



IA-1

Ar	V	W	Z
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	H	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	benzyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	benzyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	3-Me-benzyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	4-Me-benzyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	3-MeO-benzyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	4-MeO-benzyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	H	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	H	Br
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	cyclopropyl	CH_2CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	CH_2CF_3	CH_2CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	H	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	benzyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	benzyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	3-Me-benzyl	cyclopropyl
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	3-MeO-benzyl	benzyl
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	H	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	C≡CCH_3	CH_2CH_3	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	Cl	$CH_2CH=CH_2$	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2CH_3	$CH_2CH=CH_2$	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	Cl	CH_2CH_3	CH_2CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	Cl	H	H
4-cyclopropylnaphth-1-yl	CN	H	CH_3
4-cyclopropylnaphth-1-yl	CN	benzyl	CH_3
4-cyclopropylnaphth-1-yl	CN	benzyl	H
4-cyclopropylnaphth-1-yl	CN	H	H
4-cyclopropylnaphth-1-yl	CH=CHCN	H	CH_3
4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	CH_3
4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	H
4-cyclopropylnaphth-1-yl	CH=CHCN	H	H
4-cyclopropylnaphth-1-yl	SO_2NHCH_3	CH_2CN	F
4-cyclopropylnaphth-1-yl	SO_2NHCH_3	cyclopropyl	Cl
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_2CH_2CN	Br
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_2CN	benzyl
o,o'-di-CH_3O-*p*-CN-phenyl	C≡CCH_3	3-MeO-benzyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	F	3-Me-benzyl	Cl
o,o'-di-CH_2O-*p*-CN-phenyl	CN	H	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	CN	benzyl	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	CN	benzyl	H

Ar	V	W	Z
o,o'-di-CH_3O-*p*-CN-phenyl	CN	H	H
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	H	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	H
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	H	H
o,o'-di-CH_3-*p*-CN-phenyl	CN	H	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CN	benzyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CN	3,5-di MeO-benzyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CN	benzyl	H
o,o'-di-CH_3-*p*-CN-phenyl	CN	H	H
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	H	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	H
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	H	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	H	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	benzyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	benzyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	H	F
4-cyclopropylnaphth-1-yl	CN	H	F
4-cyclopropylnaphth-1-yl	CN	benzyl	F
4-cyclopropylnaphth-1-yl	CH=CHCN	H	F
4-cyclopropylnaphth-1-yl	CH=CHCN	benzyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	CN	H	F
o,o'-di-CH_3O-*p*-CN-phenyl	CN	benzyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	H	F
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	benzyl	F
o,o'-di-CH_3-*p*-CN-phenyl	CN	H	F
o,o'-di-CH_3-*p*-CN-phenyl	CN	benzyl	F
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	H	F
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	benzyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	H	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	benzyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	benzyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	H	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	H	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	benzyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	benzyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	H	H
4-cyclopropylnaphth-1-yl	SO_2NH_2	H	CH_3
4-cyclopropylnaphth-1-yl	SO_2NH_2	benzyl	CH_3
4-cyclopropylnaphth-1-yl	SO_2NH_2	benzyl	H
4-cyclopropylnaphth-1-yl	SO_2NH_2	H	H
4-cyclopropylnaphth-1-yl	F	H	CH_3
4-cyclopropylnaphth-1-yl	F	benzyl	CH_3
4-cyclopropylnaphth-1-yl	F	benzyl	H
4-cyclopropylnaphth-1-yl	F	H	H

Ar	V	W	Z
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	H
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	H
o,o'-di-CH_3O-*p*-CN-phenyl	F	H	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	F	benzyl	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	F	benzyl	H
o,o'-di-CH_3O-*p*-CN-phenyl	F	H	H
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	H	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	3-Me-benzyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NHCH_3	benzyl	H
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	H
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	H	H
o,o'-di-CH_3-*p*-CN-phenyl	F	H	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	F	benzyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	F	benzyl	H
o,o'-di-CH_3-*p*-CN-phenyl	F	H	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	H	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	benzyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	benzyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	H	F
4-cyclopropylnaphth-1-yl	SO_2NH_2	H	F
4-cyclopropylnaphth-1-yl	SO_2NH_2	benzyl	F
4-cyclopropylnaphth-1-yl	F	H	F
4-cyclopropylnaphth-1-yl	F	benzyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	H	F
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	benzyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	F	H	F
o,o'-di-CH_3O-*p*-CN-phenyl	F	benzyl	F
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	H	F
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	benzyl	F
o,o'-di-CH_3-*p*-CN-phenyl	F	H	F
o,o'-di-CH_3-*p*-CN-phenyl	F	benzyl	F
2,4,6-trimethyl phenyl	CN	H	CH_3
2,4,6-trimethyl phenyl	CN	benzyl	CH_3
2,4,6-trimethyl phenyl	CN	benzyl	H
2,4,6-trimethyl phenyl	CN	H	H
2,4,6-trimethyl phenyl	CH=CHCN	H	CH_3
2,4,6-trimethyl phenyl	CH=CHCN	benzyl	CH_3
2,4,6-trimethyl phenyl	CH=CHCN	benzyl	H
2,4,6-trimethyl phenyl	CH=CHCN	H	H
2,4,6-trimethyl phenyl	CN	H	F
2,4,6-trimethyl phenyl	CN	benzyl	F
2,4,6-trimethyl phenyl	CH=CHCN	H	F
2,4,6-trimethyl phenyl	CH=CHCN	benzyl	F
2,4,6-trimethyl phenyl	SO_2NH_2	H	CH_3

Ar	V	W	Z
2,4,6-trimethyl phenyl	SO_2NH_2	benzyl	CH_3
2,4,6-trimethyl phenyl	SO_2NH_2	benzyl	H
2,4,6-trimethyl phenyl	SO_2NH_2	H	H
2,4,6-trimethyl phenyl	F	H	CH_3
2,4,6-trimethyl phenyl	F	benzyl	CH_3
2,4,6-trimethyl phenyl	F	benzyl	H
4-cyclopropyl phenyl	F	H	H
4-cyclopropyl phenyl	SO_2NH_2	H	F
4-cyclopropyl phenyl	SO_2NH_2	benzyl	F
4-cyclopropyl phenyl	F	H	F
4-cyclopropyl phenyl	F	benzyl	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	H	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	benzyl	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	benzyl	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	H	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	benzyl	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	benzyl	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	H	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	benzyl	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	H	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	benzyl	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	H	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	H	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	H	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	benzyl	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	H	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	benzyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	CH_3	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	cyclopropyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	cyclopropyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	CH_3	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	CH_3	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	cyclopropyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	cyclopropyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	CH_3	H
4-cyclopropylnaphth-1-yl	CN	CH_3	CH_3
4-cyclopropylnaphth-1-yl	CN	cyclopropyl	CH_3
4-cyclopropylnaphth-1-yl	CN	cyclopropyl	H
4-cyclopropylnaphth-1-yl	CN	CH_3	H

Ar	V	W	Z
4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	CH_3
4-cyclopropylnaphth-1-yl	CH=CHCN	cyclopropyl	CH_3
4-cyclopropylnaphth-1-yl	CH=CHCN	cyclopropyl	H
4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	H
o,o'-di-CH_3O-*p*-CN-phenyl	CN	CH_3	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	H
o,o'-di-CH_3O-*p*-CN-phenyl	CN	CH_3	H
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	H
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	H
o,o'-di-CH_3-*p*-CN-phenyl	CN	CH_3	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CN	cyclopropyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CN	cyclopropyl	H
o,o'-di-CH_3-*p*-CN-phenyl	CN	CH_3	H
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	H
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	CH_3	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CN	cyclopropyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	cyclopropyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	CH=CHCN	CH_3	F
4-cyclopropylnaphth-1-yl	CN	CH_3	F
4-cyclopropylnaphth-1-yl	CN	cyclopropyl	F
4-cyclopropylnaphth-1-yl	CH=CHCN	CH_3	F
4-cyclopropylnaphth-1-yl	CH=CHCN	cyclopropyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	CN	CH_3	F
o,o'-di-CH_3O-*p*-CN-phenyl	CN	cyclopropyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	CH_3	F
o,o'-di-CH_3O-*p*-CN-phenyl	CH=CHCN	cyclopropyl	F
o,o'-di-CH_3-*p*-CN-phenyl	CN	CH_3	F
o,o'-di-CH_3-*p*-CN-phenyl	CN	cyclopropyl	F
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	CH_3	F
o,o'-di-CH_3-*p*-CN-phenyl	CH=CHCN	cyclopropyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	CH_3	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	cyclopropyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	cyclopropyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	CH_3	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NHCH_3	CH_3	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	cyclopropyl	CH_3
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	cyclopropyl	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	CH_3	H
4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	CH_3
4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	CH_3
4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	H

Ar	V	W	Z
4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	H
4-cyclopropylnaphth-1-yl	F	CH_3	CH_3
4-cyclopropylnaphth-1-yl	F	cyclopropyl	CH_3
4-cyclopropylnaphth-1-yl	F	cyclopropyl	H
4-cyclopropylnaphth-1-yl	F	CH_3	H
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NHCH_3	CH_3	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	H
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	H
o,o'-di-CH_3O-*p*-CN-phenyl	F	CH_3	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	F	cyclopropyl	CH_3
o,o'-di-CH_3O-*p*-CN-phenyl	F	cyclopropyl	H
o,o'-di-CH_3O-*p*-CN-phenyl	F	CH_3	H
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	H
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	H
o,o'-di-CH_3-*p*-CN-phenyl	F	CH_3	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	F	cyclopropyl	CH_3
o,o'-di-CH_3-*p*-CN-phenyl	F	cyclopropyl	H
o,o'-di-CH_3-*p*-CN-phenyl	F	CH_3	H
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	CH_3	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	SO_2NH_2	cyclopropyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	cyclopropyl	F
o,o'-diCH_3O-*p*-(CH=CHCN)phenyl	F	CH_3	F
4-cyclopropylnaphth-1-yl	SO_2NH_2	CH_3	F
4-cyclopropylnaphth-1-yl	SO_2NH_2	cyclopropyl	F
4-cyclopropylnaphth-1-yl	F	CH_3	F
4-cyclopropylnaphth-1-yl	F	cyclopropyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	CH_3	F
o,o'-di-CH_3O-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	F
o,o'-di-CH_3O-*p*-CN-phenyl	F	CH_3	F
o,o'-di-CH_3O-*p*-CN-phenyl	F	cyclopropyl	F
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	CH_3	F
o,o'-di-CH_3-*p*-CN-phenyl	SO_2NH_2	cyclopropyl	F
o,o'-di-CH_3-*p*-CN-phenyl	F	CH_3	F
o,o'-di-CH_3-*p*-CN-phenyl	F	cyclopropyl	F
4-cyclopropyl phenyl	CN	CH_3	CH_3
2,4,6-trimethyl phenyl	CN	cyclopropyl	CH_3
2,4,6-trimethyl phenyl	CN	cyclopropyl	H
2,4,6-trimethyl phenyl	CN	CH_3	H
2,4,6-trimethyl phenyl	CH=CHCN	CH_3	CH_3
2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	CH_3
2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	H
2,4,6-trimethyl phenyl	CH=CHCN	CH_3	H
2,4,6-trimethyl phenyl	CN	CH_3	F

Ar	V	W	Z
2,4,6-trimethyl phenyl	CN	cyclopropyl	F
2,4,6-trimethyl phenyl	CH=CHCN	CH_3	F
2,4,6-trimethyl phenyl	CH=CHCN	cyclopropyl	F
2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	CH_3
2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	CH_3
2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	H
2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	H
2,4,6-trimethyl phenyl	F	CH_3	CH_3
2,4,6-trimethyl phenyl	F	cyclopropyl	CH_3
2,4,6-trimethyl phenyl	F	cyclopropyl	H
4-cyclopropyl phenyl	F	CH_3	H
4-cyclopropyl phenyl	SO_2NH_2	CH_3	F
4-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	F
4-cyclopropyl phenyl	F	CH_3	F
4-cyclopropyl phenyl	F	cyclopropyl	F
2,4,6-trimethyl phenyl	CN	CH_3	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	cyclopropyl	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	cyclopropyl	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	CH_3	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	CN	cyclopropyl	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	CH_3	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	CH=CHCN	cyclopropyl	F
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	cyclopropyl	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	SO_2NH_2	CH_3	H
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	CH_3	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	cyclopropyl	CH_3
o,o'-dimethyl-*p*-cyclopropyl phenyl	F	cyclopropyl	H
2,4,6-trimethyl phenyl	F	CH_3	H
2,4,6-trimethyl phenyl	SO_2NH_2	CH_3	F
2,4,6-trimethyl phenyl	SO_2NH_2	cyclopropyl	F
2,4,6-trimethyl phenyl	F	CH_3	F
2,4,6-trimethyl phenyl	F	cyclopropyl	F
o,o'-di-CH_3-*p*-acetyl-phenyl	CN	CH_3	H
o,o'-di-CH_3-*p*-acetyl-phenyl	CN	H	H
o,o'-di-CH_3-*p*-acetyl-phenyl	CN	CH_3	Cl
o,o'-di-CH_3-*p*-acetyl-phenyl	CN	H	Cl